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SEQUENCE LISTING

<110> Neuropa Ltd

<120> Essential genes and assays relating thereto.

<130> Neuropa Sequence Patent 1

<140>

<141>

<160> 902

<170> PatentIn Ver. 2.0

<210> 1

<211> 131

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (4)..(131)

<223> Area matching Drosophila Frizzled gene Acc. No.

X54648

<400> 1

gcaccatggtt ttcagttccc cagtttgtca gcgtatgcc taccatgcgg atgtgctcgc 60
ggattgattt cgactcgaac ttcggtccg ttttcgtctt ttaacgtaaa tcccgtgcga 120
aaaagttgaa t

131

<210> 2

<211> 345

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (68) .. (345)

<223> Area matching *Drosophila* Ryanodine receptor gene

Acc. No. D17389.

<400> 2

ggcgaaagta tccgcagtac cgagtgaatc agctgttcgc ccagcaaaag caaaacaaac 60
agccgaacga gagagtgcga gaaaaagtgc tctctccact ctgcgttggt ccgcgagtgg 120
gtgagcgtgt gtgtaaaaat agcgagtggg aggggattcc caaaatataa acaaaagttc 180
gtgccactcg agttctgtcc gcccatatag aaaccctcgc cgacagtcac tcccacccgt 240
gacgagtgtg aacaatgcac ttctaaccgt aaacatattc ccaatctttc gaaggaaatt 300
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<210> 3

<211> 354

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1) .. (354)

<223> Area matching Intron of *Drosophila* Muscarinic

acetylcholine receptor, Acc. No. M23412. See

genomic sequence AC006938.

<400> 3

tccgggactg aagctgaaaa ttctggccaa ggtatataac ggtacagagc cgaggagcgg 60
agagagccag agccgagcag cagccgagag agagcgtaag ggagagagtg ggcgacgcga 120
gttcttttatg atggaatttg tgttttttgg gcagcatggc gagcatcctt ttaccaaacac 180
cctcgcacaa aggacatacg gaaaaacggg ctggcgctgt gtgtgtgcag ccgaaaatgt 240
gctggcagcg gaacttaatg gatgaatatg aatgaaacgc cgcaacagtc caattgggct 300
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<210> 4

<211> 607

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (9)..(277)

<223> Area matching *Drosophila* Tpr homologue gene, Acc.

No. U91980

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agaaagtaaa ctctgcaccg ctccatataa atttaaccgc tgcttgacaa ggatcaactg 120
cgaacatgga tctcagtggc ccacaaactc tgaacaacat acttcagccc gacgagttga 180
aactcgtgcc ggaagacgtc cagaagaaat tgctggagta catcaacaat ttctcagatg 240
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aactttgcgg cgtttacggc ctcagatacc gcttcttgta ataagcaatc cgcgactgta 420
tggtttctag cgtggtaaac actcttgccg catttacata tttttgtata gaaattaaat 480
ataaaattcc gggttgggtg aattaaaaac aatggctgct gcagcaacat tattttcctt 540

ataatttcac ctaccggtgt ggtacactgg cgggcatttt ccaccaaaca gtgattagtc 600
cgagttt 607

<210> 5

<211> 585

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1) .. (585)

<223> Area matching *Drosophila* Type II topoisomerase
gene, Acc. No. X61209

<400> 5

atttgtgcgc cttgccagct ctaaaaccag caatacttct catttgttgt cggttgtgaa 60
aagttgttaa atgtgctgtg cgtattttta tagttagttag agaactgtac aagtttttagc 120
taaaggcagc agacgcgtgg ggcacgtaca agtcgaaaat tgtagtgcac cgcctcgtgt 180
atcgctgca acatagagtt ttgccgcact tcggttgtcg gcggcagcaa gaaaaggcca 240
caaatacttg gcaatttttt aaccaggtaa gcagaaagtg ctgaatcata atcgtagaat 300
tggctgtacc gtagaaccta agagccctgt ctaattaatc ctttaatatg atggatatag 360
caatttttcg gtggcgctgc ttgcaaatta aaaatggcga tacccggtat agacatttag 420
ctaatttttg gcctttaaaa accatagttt tttgattttt tagcgcgag cgccgtatgt 480
aggcctgaat ttgtttacta taaagtgaaa cccctcgaag aaccttaata ggaaataata 540
aatagccggt gactaccggc aacgcccatt aacacgcaca cttac 585

<210> 6

<211> 408

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (270)..(408)

<223> Area matching Drosophila Neuron surface antigen 2
gene, Acc. No. U22439.

<400> 6

gcttagatga tgattcagtg gagaagctcg gcgtcggatt gtcgtctact ccgaacttga 60
gaagcggcgg agcttggggg tggaccccat ttgtttatac ggccctctcg agccggcgctc 120
gttgtcaatt atcggtttaa cccatgtcga ccgcgggggc cagtggcaat taattaattc 180
aatcgcttca attgactgcg tatcgctgtt aggaacggct ttaatcgctg taattcaata 240
aacatttcct gctctctctt cccatcgcag ccaaaatcgg aatcttctat gtggccttct 300
acggagtect agccgccctc gttgccatct gcattgtggc cttcttccaa actctcgatc 360
ctcgcatccc caagtggacc ctggaccgtt ccctgatagg taaaaatc . 408

<210> 7

<211> 540

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (30)..(461)

<223> Area matching Drosophila Indora gene, Acc. No.
Y13272.

<400> 7

cgacgggacc accttatggt attatatgag ctgaaccata cttttttcga taaccgaatt 60
atcccaaact tatcgggtgc agcttataag agttgcacac cgtccggata cttagctcac 120
catactnnnt ttacattggt atgaccacgc tgactgcaag ccactaccg attattcacc 180

gagactttat cgccaactgc ttcagtcgcc tctacaaaac cccccgtac actcagacta 240
gggtactcat agacacccta ggctgagacc gactgaaggc accttactgc cgaatgtcct 300
tggcatgata ggttcccaca actcgtcctt ggaggtcttc cggcgcgtaa tacgcgttgc 360
cgatcttctt ccgaagtcgc gattttatga acgtcgggtcc aaacttggcg ttataaccag 420
tttgaaagca gcttggcttg aaattccggc gataaacttc ttggccttcg acaaacgata 480
ccatacgaga acngatatta tatctcttct cgnctcgnnt gggcttactt ctcacttgac 540

<210> 8

<211> 267

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(267)

<223> Area matching *Drosophila* GDP dissociation
inhibitor homologue gene, Acc. No. L03209

<400> 8

gtctgtacga caagttcgga ttggacaaga acacgcagga cttcaccggc cagccctgg 60
cccttttccg cgacgatgag tatctgaacg agccggccgt gaacaccatc cggcggatta 120
agctctactc cgattcgctg gcgcgttacg gcaagtcgcc ctacctttat cccatgtacg 180
gcctgggtga gctgccccag ggattcgac gtctgtcggc catctacggc ggcacctaca 240
tgcttgacaa gcccatcgac gagattg 267

<210> 9

<211> 583

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (345)..(583)

<223> Area matching Drosophila Germline transcription
factor gene, Acc. No. L17340

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tcgattgtgc ttcgcaacat catcgatttg tttcaggcca aaaacggtat tatgttataa 120
tatatttata ataattaatt aagtataaat taaagactta aattaatttt taaattgtaa 180
acgtattttt cacaaatgta aatgtacgat agtacaaatt agtttaaatt atagagcatg 240
gagtgaccat cactgatcgc gttaccaaca atttttttta aataaatttg agcttgacat 300
attcgcgctc ttgatcctta tacagttaaa gcaaacaatt gatcaattaa aaaatcatca 360
tctcaattct ttcgtagtat tattcataca gacaattatt gtattaccaa tttttccctt 420
tttagtttac acctacgcca ctcatgtgta taataaaagg tttgcaattc agcacatatt 480
ttattggtaa tatatatatt cagcagtata aacagtgccg gccatgccgg ccattcatga 540
agaatttaac caaaactact tacaaatggg aaatttgatg gca 583

<210> 10

<211> 480

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1)..(480)

<223> Area matching Drosophila Histone H3 gene, Acc. No.
AB003784

<400> 10

gtttattgtg ttttcaaacg tgaagtagtg aacgtgaact ttagtgaaac ccaaacgga 60

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gatggctcgt accaagcaaa ctgctcgcaa atcgactggg ggaaaggcgc cagcgaaca 120
actggctact aaggccgctc gcaagagtgc tccagccacc ggaggtgtga agaagccaca 180
ccgctatcgc cctggaaccg tggccttgcg tgaaattcgt cgctaccaa agagcaccga 240
gcttctaate cgcaagctgc ctttccagcg tctgggtcgt gaaatcgctc aggacttta 300
gacggacttg cgattccaga gctcggcggt tatggctctg caggaagcta gcgaagccta 360
cctgggttgg ctcttcgaag ataccaactt gtgtgccatt catgccaagc gtgtcaccat 420
aatgcccaaa gacatccagt tagcgcgacg cattcttagg ccatcgtgct taagctgaca 480

<210> 11

<211> 542

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (179)..(360)

<223> Area matching *Drosophila* EST AA699128, this EST
matches the 5' of *drosophila* V-ATP ase gene
AF006655 gene.

<400> 11

ggccatggcg cctttttcct ttctgcctt ccgtgccctt cgtgcggctt cgtcatcaca 60
accggacgga ttcgtgttcg gctgacgaac cggatcgag atacttcggc cgttggcttt 120
ttcgacttcc atggcatctg gtcgttaggc cagccgttca ttcggcaacg aacccccgac 180
atagaagcac gtcagcatgt ggcacaaccg gagaaagtag gaaaaacaaa cggagtagag 240
gaaaagccca acaaaaaaaaa aaacgaacg acggccaggg aaaaatgcc aaaaacctgg 300
tggaaaaagt tcctaaccat tctattgaga cgcaaggagt gcttaggatc aagtgttttg 360
tgtaagcaac gaggcctgta ccagtgtcac catgtgcata tataccatcg aaacatagac 420
aaactggcct ggactgttgc gccagagatt tgggtggtg aatgggtcat tcggggaaat 480
gggtcctttg ctgaaaaaaaa ggccttttca ggcttcgaca tttttacgta atggacgatt 540
ac

542

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<210> 12

<211> 409

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (226)..(409)

<223> Area matching *Drosophila* mitochondrial PolB gene

Acc. No. U94702

<400> 12

gattgttggt ctcgtttcgg atttatagct agatttttaa caataagggc tggatatatt 60
aaattgaaca aatgtgatgg agacatgtta attaaactag atcacaataa caagaaaatt 120
gctttaaatt aagatagaat aaacacataa atcaacattt ttgcaaggac aatacttttc 180
agataacatt tagctgattg ttccgaaact cagttccacc tctgattttg tgctggtgag 240
aatgttgcgt ctgttcagca gcccgttttt actgcaaaat tgcaacaaaa tcgaatgaaa 300
aggccctaaa ttggacttca agcagctaac gcatccaccc aaggtgccac agacacccag 360
tggactccga agtttccgac accagegcct tcgaaatcca gatcgacac 409

<210> 13

<211> 507

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (110)..(191)

<223> Area matching *Drosophila* Integrin beta subunit

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gene, Acc. No. L13305.

<220>

<221> intron

<222> (192) .. (395)

<223> Probable Intron in *Drosophila integrin* gene

<220>

<221> misc_feature

<222> (396) .. (472)

<223> Area matching *Drosophila integrin* gene

<400> 13

gtagtgggga agaattggaa gggtgacaca catgaaaaag tgttggtagc cacatgataa 60
atcaaatttg ataagataag aaaagctaaa taaaacaatt atccannnga ccaacttaag 120
gtatgccgcg tgggggtgtga cttggacagc ctgatcactg gtttcgtagt ccttttagggg 180
cttatacctga aggctctagg accggctggt tctcgatat atccgtttca ctgcagttgt 240
agttaagtag ttgccggcga gagagacaac gatatccac ctggtattcc tgatatgcaa 300
ccaaatagga aaatgattga cttcgcaagg atgacagcag cagtaggaac aggaaccgtt 360
tatgttttct tgccatctcc ctcgtaactca ccttgggtccg tgcaccaagc cgcattccag 420
atgagcggat aaacatcttt cgcagctgct gcgtgcctgc actgatcatc tgcgtaaaag 480
aaatggcgat aacaaatccg ttatgtc 507

<210> 14

<211> 432

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1) .. (432)

<223> Area matching Drosophila Tra-2 gene. Acc. No.

X57484

<400> 14

atcgggagcc actcagtagc gggcgtctcc attgcagcgc cagatataaa cacaagcgat 60
cggcgtcatc atcgtcagcg gggacaactt catccggaca caaggaccgc aggtaaatgt 120
gtacacacat atgtgagacg accctaaacg atacctcttt tgacatgaag catcgagtag 180
ttttgactgg cagtttggaa aaaagggttca actgtcatag ggccctttca tttggatttg 240
ccccctcagc cgattcagct ggtgctcttg ccaagaaagt taaaacaaa aatcattcaa 300
gccgatttca tttcattgga agaaaccaac caaccaacca accaaccaac gaacatcact 360
atgtaagaac ccaccgaagc aatcattttc attctacgtc cactaccaa gaatttggcc 420
gaaagaggtc ga 432

<210> 15

<211> 439

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (61)..(276)

<223> Area matching Drosophila EF2 gene. Acc. No.

X15805

<400> 15

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ggtcaacttc accgtcgacg agatccgtgg cctcatggnn nacatccgca acatgtctgt 120
gattgccccg tagaccacgg caagtccact ctgaccgatt cccttggtgc gaaggctggt 180
tattggcagg agccaaggct ggtgagactc gtttactga caccgcgaag gacgagcagg 240
agcgctgcat taccatcaag tcgacgtaag accagtcatg ttccagcacc cacggctttt 300

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ttaataagct ttcttttttg cgtggctttc ctgttatttg aggtggagga aaaggatctt 360
ggtgttgatt taccacccgg ttagcgcgag aaggagtga aagggtttcc tgatcacttt 420
gatcgattgc ccggttcac 439

<210> 16

<211> 532

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1) .. (532)

<223> Area matching *Drosophila* genomic sequence

AC005121. *Drosophila* TU-36B gene matches this
sequence 49bp 3' to NPS0018.

<400> 16

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cgctacgtaa acaaactttg cggttagtct gcatctgggg tgtccagaac gaccggttct 120
ttcgttaggc actaagatga acttggaat caaacggcta gttatcagca acgattaagc 180
actagcgttc aagggtacttc tgggggttaa ataaactcca tttatcagtg tacatcgatt 240
aacaacagt gcacaaaatg acgccaatg ttaaggacga tgggtgactgg agagtatccg 300
gaatatccag aaattaccgg agctatcgcc agcatcgacc gattaccagt gaaagggttg 360
catcgaatat acccataaat ttcaaattaa ttaaataaaa ctacatattt acattttctc 420
ttgctcagct ggctggaggg gaaaaatgta gatgacgaag ccgaaggctt ttggcgaatt 480
aacgatcgct ctacgactta agcgactttg ccggtcgctc cgggtgggtc at 532

<210> 17

<211> 536

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (250)..(536)

<223> Area matching Drosophila GO protein alpha subunit
homolog class II gene, Acc. No. M29602

<400> 17

atcgggtgcaa taaaaacagc gagtcgcgaa aaagaagcgc aaagcgaacg gaaccaataa 60
gaacagccaa acgcaaagag agcctcctgc acacacacgc acacagcagg ctgaagcaga 120
cccacacaca cgcatacact agtgcggtgt gtatacgact ggaaaactag gcggtggtaa 180
atgtgaagct gaaaaaagct gaaaaaaagg aaaaggaaaa ctcgtaggggt ggtgggtggc 240
ggcccagtgg gcgggggggtg tggcagtgtg cagcgcgtga gagtgccgta gtgcgtgccg 300
tgtgagtgag tgagtgtgtg cgcgcgtgtg agtgaaacag cgacaaacta aatgaaaatt 360
tatacatccg aaatgggttaa cagtttgcac aaaaacggca ttactttttg catatgttaa 420
tgtgcttagg caaacgctcg aaaaagaaaa cttcacacc caccggcttt tttttcacca 480
acccggcgct ttttttagcgc ctacgcccac gcttaatata taccctgca taaaaa 536

<210> 18

<211> 476

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (81)..(476)

<223> Area matching Drosophila Lachesin gene, Acc. No.
L13255

<400> 18

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ggcacattca aggtgcccat ctccaggcaa gttgcgctct tgatggcgca cttttcaaag 60
ccagagattc attcgtttcg cgactttcga actgtgaagt tgtctctccg gcgcggttacc 120
tccgtcttgg ccaaaaactcg tgactgatcg agagaagaag tctgaaacca gctctgagcg 180
agaagacaag tgtggagact gcagttcagc atccgcgttt gctgtgctca agaaagaaac 240
ggcaatagtt gtcttcggtt tcttggaaga cgtcttcgcc gcgctctcac cctatattgga 300
gaagatttgg agatcttggg gcgcagctct tgagaaacac tacatatatt aaatcgcgcg 360
cttgcagggt ggtggtgcta aaagtcaatt ttaaagatgt ggcgcccgag tatctcgaat 420
tggcgtgtgg agcacctgct ctggccattt tttgtgcaca aacgctagca cagcga 476

<210> 19

<211> 457

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (119)..(457)

<223> Area matching *Drosophila* larval serum protein 1

beta subunit gene (inverted), Acc. No. U63556

<400> 19

ctcgtgcgtg taatttttgg tagccgggaa tggcgttcgc gccgtcccga catctgcaat 60
aaatttttaa agtatcatta ttttcatata tgtagcctgc cttgcaacta cattgataga 120
atcaaagac ccccgaaagt gtattactac cgatgaggaa cgaacgcctt ttcaaattgt 180
gggatcccct ttagatatat ggaaaacagt gccactttta cttgggttttc gaaagtttat 240
tagacttttt gcacacctta ctacttaggt atcagacact ctaaaaacat ccgcgctcat 300
tcagtagatc gttccgtgga tcgttttccg gatttcgcaa tcgaagccgc acacacaacg 360
acgacgtca gacttgaaga cttggtgtag taatcgtgaa gaaaggtgta gtccgagtgg 420
cccgtagtgt gactacctct tgtacttggg gtaggct 457

<210> 20

<211> 577

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (121)..(417)

<223> Area matching *Drosophila* Positive transcription
elongation factor b, Acc. No. AF027300

<220>

<221> intron

<222> (418)..(480)

<223> Probable intron

<220>

<221> misc_feature

<222> (482)..(577)

<223> Area matching *Drosophila* Positive transcription
elongation factor b, Acc. No. AF027300

<400> 20

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tttagtcaac agctgtagaa acaccaattg ttgccgattt ctttcttttc gactgtcggc 180
ttctcgcgaa actgtgattg tgaaaattgt acaaataagag gcaaatttaa ccatggcgca 240
catgtcccac atgtccagc agccttcggg gtcgacgccc tccaacgtgg gctccagctc 300
atcgcgcacg atgtccctga tggagaaaca aaagtacatc gaggactacg actttcccta 360
ctgcgacgag agcaacaaat acgaaaagggt ggcgaaaatt ggccaaggca ccttcgggta 420
agtctccaaa ttggtgaaaa ctaactttta actaaaacat acgacccctt tgattacaga 480

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agagggttttt aaggctcgcg agaaaaaggg cacaagaagt ttgtggcgtg aagaagggtgc 540
tgatggacaa cgaaaggagc cgtgcgtga aagcaca 577

<210> 21

<211> 577

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1) .. (577)

<223> Area matching *Drosophila* organellar-type

Ca-ATPase gene, Acc. No. X84681

<400> 21

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ttggagaaaag aggcagctct gcacaaataa cgtaactcgg acgatatacg ttttcagtca 120
gccctgtctt gtgcgaataa tgtcgtgtca tagtgaggca gaacggcgat aggcagtaaa 180
tcgcggcttg gtacttagtg caatagttat cagcacacat attcagaaaa aagcgccatg 240
ggttatatta tatagagagt cagtggaaaa aagtacttaa cacacgcagt gcgtcgttta 300
gcgagggttaa cgtaggagca gagcaccgct attacggacc agatccccc atcccccgca 360
gaaactgaga atagaaaaac gaaaattgcg tctgttgtgc cgaagtgaca cgtgtgtgaa 420
tctcataagc ggagcgattt ggccagggtg acaaccctca tagtaatgca atattccagc 480
atattcttcg accccgatcc gacaattccg atcctaagtt ggcgccgata ctgcgcgact 540
ttatgggcaa tccggggccg tcagaatgcc tgaatcg 577

<210> 22

<211> 534

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(534)

<223> Area matching Drosophila GTP-binding protein,

Acc. No. X71866

<400> 22

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ttctgtgaac cgcgttaact ctcagccagc catgagcaca atattggaga aaatctcggc 120
catcgagtcg gaggtgagtg gaacttggag tacctgccga tcttacagaa actaacctgt 180
ctcgcatcca ttaccccg gcattcccc ctggattcta tctaaatcac cgggttggtg 240
gaccaccttc ttaactgaat cctagatggc ccgaacccaa aagaacaagg ccacctcggc 300
ccatttgggt ctactgaagg cgaagctggc taagctgcga cgcgaactga tttcccccaa 360
aggaggcggc ggcggaaccg gcgaaggtgg gctcttgggt atacaattaa ggcaatcact 420
aaacattatg tatttccagc tggcttcgag gtggccaaga ctggagatgc ccgggtggga 480
ttcgtaggat ttcttctgt gggtaaatcc aactgctct tcaacttggc ttgg 534

<210> 23

<211> 523

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1)..(523)

<223> Area matching Drosophila genomic sequence

AC004351. Drosophila G protein alpha subunit gene

matches in ssame area indicating that NPS0027 lies

in an intron.

18/586

<400> 23

gctgtagaca gcaagaggag gagaatcgta agaaagtgtt tgcgccatga gtaatcaagt 60
taaattggcgc ctggcctcag ttatcgaagt gggaaatgtg ttaatcagcg gggagtgtga 120
aattgagcgg acccaccgaa aaagtaaaca attaaatcag atgaaatgcg gccccaaaac 180
ggaagcccc cacctagtag tgactttcac gcagatctct cgattatcat gaaatttcct 240
atatgtgatg tacatacata tgtacatcaa ttatttaacc acatatagta tattgacgta 300
catatgtata aggtcgctcg cttggcgata attttgataa gcccaatgat actttcagtt 360
taaattgtgtt ggtaagcgag ttcttaaata attgtagatt attaagttgc tgtgtgttga 420
cagtctgagt gcccgatttt gatattggtg ccccgacgag atgacactat tttggttata 480
tattattttc ttccattttt ttcattttt tttttttttt ttt 523

<210> 24

<211> 305

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (19)..(215)

<223> Area matching *Drosophila* EST AA246996. This EST
matches *Drosophila* CD39-like NTPase gene, Acc. No.
AF041048

<400> 24

gttgattcca agacgccatt ccgtgcgcgt tggttcctg atcagagttt atcattcggc 60
gggcgcggcc tcattagatt agatcgacat tagtgcgttc cgctcggcga tcggcagcaa 120
tcgatccgaa ataaacaaac gctcgcgtat ttacataatt taagtgaaaa gtaacgacga 180
cagaatgacg aacaccgatg tgcgaaagag aaaagtaagg aaaaggtcaa aagggcaatc 240
cacagcacia atttaatgcc aatttcattg cgctctctca cacacacag cacacatgcg 300
aattc 305

<210> 25

<211> 473

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (387)..(473)

<223> Area matching *Drosophila* phosphatidylinositol

4-phosphate 5 kinase gene (inverted) , Acc. No.

AF071417

<400> 25

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gtcggcgcca tctcctatat atctttcttc gtgtctgttt tccttttttt tttaatat 60
atcgcacgca tgacacgtag aatagaacaa aaacaacaat aattgtacgt taacaacgga 120
aagttttgcc aaattcagtg aatgaaacta aactaactga aatgtgcgag gctagttgct 180
ttattagcaa taacgttgga tcttatttaa atggaagaag tccctctaaa gttaataact 240
tgccacttga ccctcgtttt tgtggtcggt gttgttgtgt tgcgtgtgct gtggctgctt 300
ttgccttggg accatttggt gtgaattatg agcttgcaat tatagcgttt tgccggtttt 360
at ttgttaatt taattagcgt acttacacag aaatgctcga gggaatagtt tgctagaggt 420
caaaaaaacc gaaagatatt cagcgaaaag agataattat ttgccctcgg ctg 473
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<210> 26

<211> 319

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(319)

20/586

<223> Area matching Drosophila rbp9 gene, Acc. No.

S55886

<400> 26

cgctcttggg tttaaagccc ctctggcacc ttccttcag tcagctgccg ttgttggtgt 60
tgcttaagtg ttgttttggg tgccgtgctg gctctctcag ctccaacaac agcaatgcgg 120
ccggcttacg agccccgggt ctcttcgcct cttttggagc tcgctctttg ccgaacggag 180
aacctaccgc aattcgtttc gtgttcacgg ctgcatttcc ttgtttatgt ttgccaagc 240
caaagttag ggtacatcgg tttaagtgcc gagccaggaa gaaaggagag agcgagcgaa 300
ccgagtaccg tttatgttg 319

<210> 27

<211> 493

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1)..(493)

<223> Area matching Drosophila manganese superoxide

dismutase gene, Acc. No. L34276

<400> 27

atttgaacaa ttactgcta gagatgagca gatgagaaaa tatcgaaaga cccaatcag 60
tcagtgatgt gagatcaact tatatatatt gaagttaaata agtaaaacta aaagaaatta 120
aaaactatatt ttgaaggcca ctgaaacata ttcaaactcat attgaggatt tcttaaatat 180
ttcttatgtt taaatactac tttagtgact attagcatat tttagctgca tacgtatcga 240
ctgcatccat tcgattgata cttgaattaa tcgattttgg cctctgtatg atgtcatggc 300
gctaaattgg aaataaacta tgaaattaac gtcataagtt taaaaatccg actggaacac 360
agcacacaac atgtctacat ttcaaatacc ttcccgaatc aaaatcgata taacaaataa 420
acgggcacag aacattcttc acaaatatct acatttaccg taagttgctt aaataagcta 480

aagattttat gat

493

<210> 28

<211> 571

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (233)..(377)

<223> Area matching *Drosophila* rab2 gene (inverted),

Acc. No. D84313.

<400> 28

cttcggccca ccgactccag gaatattttc ctgcgacgca attttgatct cacggtatca 60
acttttcaact tgagaccacc tgaaaccccc attttttgat tttcgggtac gaccctacg 120
cctgcgatgc cctttgtttt gttgtgttgt ttgcaattac agattgtttc cctgacaatg 180
gccaaactttt cactggccat tccgtttcaa aggaagtcgc agcttgcaact cacctgtgtc 240
tccgataatg atgtatttga acaagtacgc gtaggacatg ttttaagctg acgggggtta 300
cggtaagcta gtttttagaa agtacgatct cgtaatgcca cagataatac gcaattcttg 360
tacgttttcc aatctgttcg tatttatgat gactggctag cgacagtgtg gcactttgtg 420
gccagggctg gcggaaatac cgaaataccc gcaaggctgc aatcgctat cgatacgatg 480
cgcactggcg tggccaatcg atagtatatg tatgtatgta gaattgcaga aatttctcgc 540
acaagcaaag tgtttgggag gataaacgcc a 571

<210> 29

<211> 550

<212> DNA

<213> *Drosophila melanogaster*

22/586

<220>

<221> misc_feature

<222> (1)..(63)

<223> Area matching Drosophila myosin V gene (inverted),

Acc. No. AF003826

<400> 29

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gttccactgg ctctcctcc tactccaggt tccgcttcgc gctccttctt tctctcctct 60
ccttcttctt actcgcgtgg gagtgagttg ggtgcataaa tcccgttagg ttttaatttcc 120
ttggtggtac gttttttttc tggctctgac agcctcttta aattaccatt ttcgtggtct 180
ttttttgggt ttatgtaaat gtactgtcct aaattactta aaattagcca ggaataattt 240
ataaaaacat tgataatttt tagatcgcaa cgccaaagtg tgagaaaaac aaacaaactt 300
ccgtccctgt caccgcctga ctgactgact tatgttttgt tgttggcaaa agggcagggg 360
tgccaaaggg cgtgcagttt gggccaaatt agaaatgtgt ggttctaacc atggattaaa 420
tttgaacaaa gtaaaatata ttgcaaaaag atttgtataa tgccacagta actgaatttt 480
ttcttgcaaa acaccccaga aagcaccaat tatttggcgc gcaatgccct gcagttagat 540
ttcagcactg                                     550
```

<210> 30

<211> 528

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (325)..(528)

<223> Area matching Drosophila

ribonucleoside-diphosphate reductase large subunit
gene, Acc.NoU09369.

<400> 30

agctggatta acatgcaatc atcccgacta cgccatcctg gctgctcgca ttgcagtgtc 60
caatttgcac aaggaaacca agaaggcttt ttctggtaag ttcatagctt gtattctgag 120
ttcttcgggtt aatccaatca tgattcttat tagacgtctt cgaggatctg tataatcatg 180
tgaacaagga gacgaatcaa aaagtgcctt tggatatccga gtttcactac aatgtgggta 240
agaagaacgc cacacggctg aactcatcca taatctatgg atcgtgactt tggctataac 300
tattttgggt tcaagaccct ggagcggttc tatctgctca aaagaaacgg gaaagatcgc 360
agagcgaccg cagcatatgc tgatgccgcg tgggcgatcg gaatccatgg agaggatatc 420
gatgccgggc cgtggaaact tataatcttc tatcggagcg ctacttcacg catgcatcgc 480
cacactgggt gccgctgcac aaccggccgc agttgtcgtc gggttcct 528

<210> 31

<211> 271

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (234)..(271)

<223> Area matching *Drosophila* Fzo gene, Ac. No. U95821

<400> 31

atatggacgc tttgtttaag cccgatgtct tctacaataa aacaaaaaaaa aagccaaaac 60
tggttctctt gttcttatcc ccagcatgtg catgttccac agccagaaac tgtgtgtgtg 120
tgtgtgtgtg agccattagg aggaaggaaa aacaatctaa tcaagcaatt taaacagtca 180
acagcaataa aaactgctta aatttgcacg gcttagattc tcgtggtacg aagtaacttt 240
aaagtagtga aagaccaacc gtttaatat t 271

<210> 32

<211> 450

<212> DNA

24/586

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (322)..(450)

<223> Area matching Drosophila mitochondrial

single-stranded DNA binding protein, Acc. no.

U00669

<400> 32

aatctggaat gggccttgaa atcacatctc ataggaggga aataaaaaag ctacataaat 60
gtagacaatt aagttagttc ttagccttaa cctccaagaa aatatcacgt tgagctgcta 120
attcagattt atgtaatgag ttattagaac atttgctgta tgtaattacc taatgataac 180
ggcaatagtg tacatttcct tgttcaatta acttcagtga tcaatttctt cttaggatcc 240
atgaaatgcc ggatttcata aagaaaatag ctaccatttc atttaaaaag cattcatgaa 300
gtcttaaata tttccccaca gatatgagaa cggcgactgg gcccaacgca ccgactggca 360
tcgtgtagtg gtgttcaagc ccaatctgcg tgacaccgtg ctggaatact tgaagaaggg 420
acagcgaacc atggtgcagg gaaagatcac 450

<210> 33

<211> 385

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (14)..(385)

<223> Area matching Drosophila RM62 gene. Acc. No.

X52846

<400> 33

ccgtgctgcg tatgataaat ccgtcattag cataaccgca ttgaagctaa gtcttcggga 60
aatgcttaa gcttgtgcaa tacatagccc cccgggtggg cggcgccacg ccccgaccga 120
ctgcctgctg ctggggcaac ttgctattga tttccccgag aagtggcgcg agctccgaga 180
aatgtataac gcaacgtcgc ctttttcttt tctcctccgc cagcagcagc ggcactttcg 240
cttcttcttc ttcgctctgc accgaacaac gacaacagtt ccacgggagt cgcaggaatc 300
gtgagacaat actgttccca agcacatata gtagtctcca agctcagtcg cagcgtgcgt 360
ttcgagacag ctcgaaacca gattc 385

<210> 34

<211> 442

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(422)

<223> Area matching *Drosophila* pterin-4a-carbinolamine
dehydratase gene, Acc. No. AF069297

<400> 34

gctgctggag aatacataac tgagatttgc gacaggctgc gcgaaaaata aagctcagat 60
ttaagtttgg tatttttggc cctccctctc cctccgcaca ttccaccttt tgaatacctt 120
cgtactcggt gctgttggtg cagttgtggg gaataaacca gctctgcggt tgctggcaag 180
caaattggcc actttctggc agttcggctt aatcacattc tgagcgcatt taattgttaa 240
caacattttc gatccaaaac tcgtttgttc ttagctgctg tttttgttgc tgtttctgtc 300
ggcgcggaac agctgacttt tgctgtatgt tagctaacaat tgagttaaca tggagctggg 360
aaaaactgcc aacttgtttt tgacaacgtc tgctagcaac ataactgtta taaagtctaa 420
tgccgcgtaa tttgaattta aa 442

<210> 35

26/586

<211> 510

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (329)..(346)

<223> Area matching *Drosophila cytochrome c oxidase*
subunit Va preprotein gene, Acc. No. Y09065

<220>

<221> intron

<222> (347)..(414)

<223> Probable intron

<220>

<221> misc_feature

<222> (415)..(510)

<223> Area matching *Drosophila cytochrome c oxidase*
subunit Va preprotein gene

<400> 35

gcacgcgtca agttgaagat gcagtgtgac cgcaattaaa tcatcaaaaa ataccgcctg 60
gcagtagcca gcatcaatgt ggaccgttga aaaagaaaca aggtttgatt ttgatttttt 120
ttttgctttt tttgggcaag atagaagaaa ttaaataataa ggaaaatgat aaactaactg 180
tgatcttacc cgaatttgaa atatactgaa gcagaaacat tttaaataatc tcactgttcc 240
gtgacagcga cagttataaa cgtgtccatc cctggaaaag ccagtgtttg ccaaccatca 300
ctcagatctg tcatacccggt gttgaaaagt agcaagaaca agaaaagtga gttcaagctg 360
tttctttaac caaatTTTTg caattaacaa gcatttttact gtttttaacg gcagcatggt 420
gagcatcacg gcccgttaacc tggcaagcgc cctccgcagc agcctcgtcg gcacatcgtc 480
gcgcgtggcc gccgtgcgct gtctgcacgg 510

27/586

<210> 36

<211> 401

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1)..(283)

<223> Area matching Drosophila Ubiquitin gene, Acc. No.

M22428

<400> 36

atcagtactg tccaaaatcg aaaatcgccg aaccgtagtg tgaccgtgcg gggctctgcg 60
aaaataaact tttttaggta tatggccaca cacgggggaa agcacagtgg attatatgta 120
ttaatatatt atgcaggttt tcattactta tccagatgta agccactta aagcgattta 180
acaattattht gccgaaagag tataaacaaa tttcacataa aaatggatta agaaaagctt 240
gtgtaagatt atgcgcagcg ttgccagata gctccattta aaacacttca aaaacaataa 300
gtttagaaaa tatatacata aatagcagtc gttgccgcaa cgctcaacac atcacacttt 360
taaaacaccc tttacctaca cagaaatact tttttaattt c 401

<210> 37

<211> 445

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1)..(213)

<223> Area matching Drosophila hnRNP gene Acc. No.

M28870

<400> 37

gtctgtctac ggcttttcctt tccacaggaa aatatatattt cagtttttagg gaaggggtgc 60
tacagtgagc gtcttttcggt cccagtgtcg ttattttctat agtattgctg agatatatat 120
cagagcagta aagatattta aatataagtt cttcgaaatg ggtgggtcacg acaactggaa 180
caatgggtcaa aatgaggagc aagatgtaag tagcacacaa aaccgcgact gcacagggaa 240
aaaactcagt tcggccataa tcccaatata tatatatattt ggtgatcaac gcgctttttac 300
ccatgcggca actaaagttt gatggttgeta aagcatttcc gttgcgggtt tgttacttaa 360
gactaagact aacagtagtt gtttcttaat aattgctagg gaattacaaa gcctgtcgggt 420
attggtttct cttttaactt tttag 445

<210> 38

<211> 380

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(380)

<223> Area matching *Drosophila* genomic sequenceAC006933. *Drosophila* Rhodopsin 4 gene (Acc. No.

M17719) also matches in this area indicating that

NPS0044 lies in an intron.

<400> 38

gttactgggtg acagcgatat tattgtaact ttaccacat tcctttccaa aggtactttt 60
tctggttcac agtttacatg catattggat cacttttgtc attggcaacg catgtaaadc 120
tgcttataat tgatgaacaa attcggaggc aatatgttgt attacacttt tcacgctttt 180
tcctattttct caaaccaatg agctgcgagt taatagcact gaacataagt ttcacatca 240
acatctatgc ctgcattcta tcaactcataa tgttgggata tcagatacca gcattgtatc 300

29/586

tgaataccac attctatacg ccaaaggatt atagatacaa tcaagggcta ctgggcaact 360
tcatggcctt catgggaaaa 380

<210> 39

<211> 449

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(449)

<223> Area matching *Drosophila* TipE gene, Acc. No.

U27561

<400> 39

gaatagccaa ccaaagcaaa aaagtgaaaa agacaaacaa aactgtccgt ccagcattcg 60
tttttctaca cacatttcga aagaatgtaa atgtaaagtg aagaaaaaca gagagtaaga 120
gagagacctc aaaactggcc attggcaggc caaacacata cacaggcaca ccaagcatac 180
aggacacaca ggccacacac gacacacacg cacgaacatc cagtgtttg ccgcagtcac 240
aaaataatca agaagcagct aaatcaggca aaagcaagac gactgcaacg tgctgatgtt 300
gacgaaacat ctccattggg acgaataaag caattagcaa aggttcacga ttgttgccac 360
ccacactgcc aggaggcgga agaagctgga agggattaag aatgcgggat acgttgggac 420
tcccactcgg actccgtgga gtttttagc 449

<210> 40

<211> 572

<212> DNA

<213> *Drosophila melanogaster*

<220>

30/586

<221> misc_feature

<222> (463)..(528)

<223> Area matching Drosophila EST AI405330. This EST
matches Drosophila mitochondrial ATPase coupling
factor 6 gene, Acc. No. X99665.

<400> 40

gatgagatag aataatttca aagtttttag ttcattattca tattcttcat attcatatta 60
gagtaataca agaatttatt attcatattc aatttagatc cgattttggc ttgtgtggga 120
ttttagatac agtttaggtg ttgttttggg atgaacgttt atggagcagt ttgatttaa 180
gttggacata tatagtaaga tacataaaca gacacagtgt ataaattagc ttttcataat 240
ttgtaatat tttattatag gcagtatttc gatagaggca actaatttaa gcggattggt 300
gattaaaatt cttgttcgca acgaatataa tttatatgat acagctaaca aatacaggat 360
taagccaaaa atcggttag gaaataccct tactatttaa aaagettaca tacgatagta 420
tcccatcac ccatcacgcg cacatcacta acaccaact gccattgtga actgacaatt 480
gtaacttttc cgcacgaaag ttagcatttg caaaggaaaa taagatgaaa acaagattta 540
aaatccttaa aatttattgg gggagttcca at 572

<210> 41

<211> 246

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1)..(246)

<223> Area matching Drosophila heat shock gene at
87c, proximal end, Acc. No. K01294.

<400> 41

ctaaagccaa atagaaaatt attcagttcc tggcttaagt ttttaaaagt gatattatt 60

31/586

atttggttgt aaccaaccaa aagaatgtaa ataactaata cataattatg ttagtttttaa 120
gtagcaaca aattgatttt agctatatta gctacttggt taataaatag aatatattta 180
tttaaagata attgcggttt tattgtcagg gagtgagttt gcttaaaaac tcgttttagat 240
ccccgg 246

<210> 42

<211> 407

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (221)..(318)

<223> Area matching *Drosophila* EST AA440389. This EST
matches *Drosophila* Fas gene, Acc. No. U73160

<400> 42

gtctagacat atcaaacta accctgacct cagcaatggg caaataaaaac cgcccatttg 60
gccaacatct accacatcta atctgctaata gagaatacac gcacatacca cacatatgta 120
tgtataggcg cgcgcacgca cacacctgca aaagcttttaa ctaatctaaa gtcacgagc 180
gagcttttcg tgaaatgctg cagggtcttc gtcgtcggca atttttgcac atcagtttta 240
aaaccaagt taaccgaaac ggcttggttaa tttctagctg cggcgttata aaacaccttt 300
ttttttggtg taatccaggt taaaacaata aacagtgggt ctcaaatgaa aattccatcg 360
aactttgcgg ctgttcactt ttgctgaaca gtttgcaatt cttgttt 407

<210> 43

<211> 537

<212> DNA

<213> *Drosophila melanogaster*

32/586

<220>

<221> misc_feature

<222> (15) .. (95)

<223> Area matching Drosophila EST AI297861. This EST
forms a contig with ESTs AA697916 and AI063366
which overlap 5' end of Drosophila 49KDa
phosphoprotein gene, Acc. No. M32141.

<400> 43

gtttgcagat ttacctgtta gaagagcggc tctcgagaac attttccagg cagttgcgac 60
gaatttatgc tactaaattc acccgaaatt gtcagttcac aatagtgaca ggtaagaga 120
gcgttgccag atcaaccgct tgtcagaccg gttttacaac actggcaaag tgagccctat 180
atgtgaactt ttcaaaataa aaatttgttt attgaaattg tatgtttata acttttattt 240
gtattttcaa cttcttttaa acttattttt atgatattaa ttttatattt aatcgagtgt 300
ttggcagtat taaaccattt acgcaaactg ttacatatt taaaattcga agttggaata 360
taaaaagctt tagtagaata aattaaaaat taaacagcca aattgtatag ccattttaca 420
atgcttaaga ttaaaacgga aaaagatact cgtcataact ttacaagttt ttattttaaa 480
aaatattaca atttgctaga taaattgtgc ctaaagttat cagatttagc tgcgaac 537

<210> 44

<211> 292

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (231) .. (292)

<223> Area matching Drosophila Tcp-1 gene, Acc. No.
M21159

<400> 44

atccccggggt tttgtcaaca tctgcggtgc gtctgccggc ggagcacgtt tcttactcat 60
cgcggggtcac gctctccacg aagaatgttc cggaaccaac ccggggggagg gcgatcttat 120
tttaattgga ttaacaaaaa aactcattga atccaaggag ctacaagatc ctgtggacaa 180
gcctatgcga agtgagggtta tgactacaac tcggctttta tatgctttca gttatggccg 240
ctctgtccat atcgaacatc gtgaaaagct ccttgggacc cgtgggtctg ga 292

<210> 45

<211> 349

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(349)

<223> Area matching *Drosophila* HSP70 gene Acc.No. V00213

<400> 45

cagtaaacgg cgcactgttc tcgttgcttc gagagagcgc gcctcgaatg ttcgcgaaaa 60
gagcgccgga gtataaatag aggagcttcg tcgacggaga gtcaattcta ttcaaacaag 120
caaagtgaac acatcgctaa gcgaaagcta agcaaacaaa caagcgcagc tgaacaagct 180
aaacaatctg caataaagtg caagttaaag tgaatcaatt aaaagtaacc aacaaccaag 240
taattaaact aaaaactgca actactgaaa tcaaccaaga agtaattatt gaagacaaga 300
agagaactct gaatactttc aacaagtcgt taccgaggaa agaaagaac 349

<210> 46

<211> 241

<212> DNA

<213> *Drosophila melanogaster*

<220>

34/586

<221> misc_feature

<222> (1)..(241)

<223> Area matching *Drosophila* glutamyl-prolyl-tRNA
synthetase gene, Acc. No. U59923

<400> 46

cgttagcagc tggccgtact cgtgccgttt aaaagccgaa atttcatcag tttgatttca 60
attgcaaaca aacaacctgc gaacatgtca ataaagctca aagcgaacct taacaatccg 120
cccataagtg agtatcaaac ggatgccggc tgctgtgacc tccagtgcc ggaggatctg 180
cacttagtga ggttatatcc gcatcggggc ctatttatgt acacaatata tccggcaatc 240
c 241

<210> 47

<211> 499

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (225)..(237)

<223> Area matching *Drosophila* ribosomal S4 protein
gene, Acc No. D16257.

<220>

<221> intron

<222> (238)..(333)

<223> Probable intron

<220>

<221> misc_feature

<222> (334)..(499)

<223> Area matching *Drosophila* ribosomal protein S4 gene

<400> 47

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cgctggccac accgcccga aatctgcctt ttccttttcc tgttgattg cccgacggac 60
ggtatgtgta ttttttgcag ctagccacgt gctaagttt gtcaatggaa ggcccggcat 120
tggggatttg ctggccacgg atgcggcact ggcagtggcg agcgaatgct ggcacaaaac 180
taacgtttga ttgttctatt tgcagtgatc gcccgttcaa tatagtgaat caaacatggg 240
gagtatctgt tgggtggtgaa gatatgggtc cgattgtttg tctttgcctt tggaataacct 300
gactaacggc taaaaccac tcacactttg caggctcgtg gcccgaagaa gcatttgaag 360
cgtttagccg cccccaaggc atggatgttg ggacaagctg ggaagcgtct tccgccccgc 420
gtcccctcga ccggtccaca caagctccgt gagttcctgc cctgctgat cttccttgag 480
aaaccgcttg aagtacccc                                     499
```

<210> 48

<211> 462

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(462)

<223> Area matching *Drosophila* R1b1 gene, Acc. No.

X73216

<400> 48

```
ggctgtacgt agctgtgagg atactagagc tggcaccaag ccgatggcac tatcgatagc 60
gatggctgca ttctggccgg caccatcgat ggacttgcaa tagcgattgc tatatgaaaa 120
ctaactctaaa gaggtggatg cacttcagtc gactttctat aatttgctta aactaataaa 180
tgatttgatc aatacagctt tctgtaaaaa ctggcagacg ctttctgctt ttaataattg 240
ttaatttaag ttcaacgggc tggcatcacc gtttcttagc acggactcaa gcctgagtct 300
```

36/586

attattttcaa ccaccactgt aacgaaaaca gcatggacag attgaaattc aataatttgg 360
taaataaaacg atttttattta aaattataga gttctaatta aaaagaactt ttacaggtga 420
tatccaacaa gaaggtcatt caaaaggcac gcgcccagac ca 462

<210> 49

<211> 164

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1) .. (164)

<223> Area matching *Drosophila relish* gene(inverted),

Acc No. U62005

<400> 49

atcgaaacga gctccgccga tggctgacca ttcgttttag gtacttcccc gatgttcggc 60
ggatgggaaa ttatctgcgg cggccacgtc gagatgactc acgggttttt caggcgcacc 120
actcagtgtg atttttttga tcggctatac tataagcatg tacg 164

<210> 50

<211> 207

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1) .. (207)

<223> Area matching *Drosophila HSP2* gene(inverted), Acc.

No. X07211.

<400> 50

ccaggagcct ttgtagatca ccacactaaa atgagcatac atatgtatat gtatccgata 60
taaagtattg caactataat aaacttttaa agctcacttg ctgtatccct gacttttggc 120
aattttctct gcttccaaga ctcgatttcc cgaccggcag gtgaatatga ttggcgactg 180
cttctccggt ttcgatattc cgtactt 207

<210> 51

<211> 438

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (15) .. (438)

<223> Area matching *Drosophila* MAP gene Acc. No. X54061

<400> 51

gggtgggtgt ggcacaaaat tagtcggcaa gcaattcaaa agtaagagca accggagcga 60
acaaaaaagg gaataactta ctaaaatctc tgaaagaaaa ataaaaagac taacgggctc 120
ggcaagctgt gtttatttctg acaagtaatt atatacttgg agtgcaagca aaggcgaagg 180
aagtgggaagg acaagcaacg aaatcgtgct cttatccggt cctgtactgt gtctctcttt 240
cgctgggaga gtgtgtgtat tgggtgtgagt gtagaaatct gcaagaacag caacgccaat 300
aaaagtggaa tcgagaaaaa aaacgcagtg gcgcgtgaat cacgagcaat ctgaatcatc 360
tctctacaaa aatacctggt tctgttggcg catcatttat acccaattaa atcctaaagg 420
atgggaacac cacgaagg 438

<210> 52

<211> 554

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1) .. (80)

<223> Area matching Drosophila HSP68 gene (inverted),

Acc. No. J01102

<400> 52

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gtcagaacat tccagtcagt tcgtgtgtgt gcgagcgagt caactagtgt gcacttcgca 60
ggggaaattg tcagttgaag gactgaaaag ttcaggaaat ttcgagaaat atattttttt 120
tattgacata ggtcatcatt ccaagtggtc attaaactaa attcgtatgc aagctattttt 180
tggttgattt gcggattgat acgttaagcc attcatattt ttagattctg tttttggttt 240
atatctcttt tattatatgt gcaatacata tgtgtgtatt tttcttctga ttggaatatt 300
tcctctgcag aatatgacat acaattacca taaaagtttg aacacacttt tcaaaactta 360
attattccaa ttaattattt ccaaaaattt aaagaatccg tactgctcta tatccaggat 420
acataaatat atagatacct atataggaag tttcatagat aagatgtttt atagaatact 480
tccgtagatc gggtacaatc tttaatgttt tttataaata gggaatttta agaagccaga 540
accaatgccc aaaa
```

554

<210> 53

<211> 450

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1) .. (450)

<223> Area matching Drosophila anon-66Da gene, Acc. No.

Y10015

<400> 53

gctcgggtggt agcatggcgt tagtgttgct aaacacagag ttgcatgtgg tctagtgttg 60
tgcagaaata ttagtgacag taaatcatatg acatcttatg tggatattttt cgtatcaac 120
tgttacagtc aactaagcc aattcgatag atttcgatag taaaaataaa cattttggaa 180
taacataatt acttttgtag aagttacttt ttacgggggtt aatttcaagc agacattttc 240
ccaacatggt ttacatacac ttccccaaca atttaaccga agaggagcaa atgctgcagg 300
ccaagtatca gaaactcaag aaaaagggtg gaaaactcat gccacaaatg ttgattattt 360
atattaacaa gtttttaacc cgtagaaaaa ggcactgcaa gcgcacaagg cgcccaagcc 420
ggaaccggag agtccttga ccttgaacgt 450

<210> 54

<211> 470

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (56) .. (187)

<223> Area matching *Drosophila* RAD6 gene, Acc. No.

M63792

<400> 54

ctctatacca ctgctgcccg agtttgccct caattaaaaa taaattacaa aattcatcgt 60
taccgttcgc taaacgcaac gcattgccca ggcgtccgag ttccaaatcc aacacaacac 120
gagtggtagt atcgctgtga aaaatgtcaa caccgcacg cagacgtctt atgagagatt 180
ttaaagggtg agaagaaact aaggaatcga atgcgaatag aaaagaatac taactaaacg 240
aaagctaagg aaaacaggaa ggcaaggagc gaatggcaaa gttacacaca accgttggat 300
tttacgtttt acgtgtttct cgttccgaaa aaatgctggg gaaaagaaac ctgggggctg 360
cccaatacat ataagccaac acacggacac ccgttttata tgactgtgct ccacgtctgt 420
atgtagtgga aaagtttgcg ccagccaaaa tatttcgttg tgcattgtgc 470

40/586

<210> 55

<211> 465

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (391)..(465)

<223> Area matching *Drosophila* Septin 2 gene, Acc. No.
U28966

<400> 55

agctgtagac acatcagcaa tgcggacctg ccggatcgct tctgtgtgcg accagagatg 60
ccgaggcgga aacagttaag acatttaatt ttttaatcta attactttta attaataact 120
tatgcataat tatcaatgaa tgggacattt tattattagt tattaataaac tgaaacgcta 180
aatgatatgt actgaaatct taatccatga agtgcatttc actggatgat taacaatttc 240
gtttcactat ttgccattat ggcacatgta attcattaat taattgtttt ttaattcatt 300
gttaagctat aattttcttg ttcattcata tccacatact tctttgagcc gctgggtattt 360
tggcctccgc cgttatctgg ccacactttg cagatccctt ggcgacgcct ttgatccaaa 420
ctctgcgccc ggaatattgg attattttga cttgactatt ggaaa 465

<210> 56

<211> 564

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(514)

<223> Area matching *Drosophila* Fructose 1,6 bisphosphare
aldolase gene, Acc. No. M98351

<400> 56

ggacaaacct agaaaaaaaa aaatgtgaga gagagagagc gaagagctgc agatatagag 60
aaaagcacgt ttcccgtagc tgcgccttta atctcattca atcaccgct ctttgccatc 120
gaatcagctg tgaaatacac taccatgcaa agcatttatt atcttcaatg gaaaaatatt 180
tttaaattgg aaaaaacacc agtgacattg acctgacact gaaaacaaaa ttatataata 240
ccgcatcatt aaacaacagc atatgactca atggctctaa tcggttaact cagagttcca 300
ctttaaataa cttgaccttt acaaatattc tttttatttt atggaaataa taattaggtc 360
agttcagtaa aataatccaa cacttgattg atagctatct ctgtagcccg ttgttatctt 420
tttcagtagg aacatatgta acttttgagt tacctggatt ttgggttgtc agactgtgcc 480
ggatcgtata ccgaaattta gtccaaattt ttaagtttat tttttacctc ggaaatattc 540
aaaatttggg gcttacgcat gggt 564

<210> 57

<211> 251

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (46)..(251)

<223> Area matching *Drosophila* Bottleneck gene

(inverted), Acc.No. U01035.

<400> 57

ccccagggtg aggcattaaa aagctaacgg tttcttgttt tccgcttcgg caaacaaaac 60
aggtgcgtgg tggcatagtg aatatacgca tatgtatgca cacgaatata ggtgtggaca 120
cggcggacag cgggagcacg gagtcttgcg tgattcagtt tacaacctgt ggtagtgtgt 180
ggatttagca attctgtttt atcagtcctc tagaactgat atattggcta ttcggaattg 240
ggaatttttg c 251

<210> 58

<211> 450

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (49)..(450)

<223> Area matching *Drosophila* HLH106 gene, Acc. No.

U38238

<400> 58

```
ggcccgccag tatttaatta cgaaccgttt ttgtctcttt catcagcagc attcgcaatg 60
gacacgacac tgatgaactt aatagacgct ccgctggacg agtccatgga ttgtttcaaa 120
gcgaggatg tcttcgaacc gttcgacgcc gacctgcact cggacatgct ggacatcatc 180
ctcaacgata tggacctggc gccgacgcag atgtacaaca tgctgctgga cgagcctcga 240
acgcataccc agcagacgca gtccgtggat cagcagccgc aatccgtcga gcaacagccg 300
cacgtgaaaa gcgagcactc ttcgccagtg cacatcaagg aggaactgca tcagcagcaa 360
caacaatcgc cgcttctcgc tacaaccag atcccctcat agccacaagc tacaattgtc 420
ccacaacagc cgacgggcct ttgaaggccg                                     450
```

<210> 59

<211> 581

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (328)..(581)

<223> Area matching *Drosophila* DAD gene, Acc. No.

AB004232.

<400> 59

accacgccat agtagccatc caacggatgc tctccactct cagatgtctt ggattctttg 60
gttttagcact tgtagtagga atgggaatgt gaaaaatatg acgatatttt aacaagtctt 120
ttctaattaa taataaaact gaagttctta tacattgtta gaacgggaac tttatgtatg 180
attctaattt tacaatttct tggctcttta atttttctct ctctctctaa acctccctct 240
cccaggcgct ctctcaggcg tttctccac gtttattccc cacagctcca aagactatca 300
atccgcacag ttagcgcttc gctcattgcc ccaacaattt tcaaccgcgt cgcttgtgtg 360
ttcttttgcc gttcgagaaa tccaaatccg aaagatatca acgaaaagat gggatacttt 420
gacgtattgc cacgagaaat tttccgaata acgttatttg tgttcgagac tgctaaatga 480
ttttggggta attaaaatga caaaaaacgc agttctaaat atcggtttt tcgcctttcc 540
cgatcttttt tcgcacatta acgggttttg ttttggtggt g 581

<210> 60

<211> 436

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(436)

<223> Area matching *Drosophila* genomic sequence

AC005557. *Drosophila* Brother gene matches this
sequence 15bp 3' to NPS0066.

<400> 60

agttaaacia tacaatacac aaactacagc tgtttaatgt gcccggaactc tagagttgtc 60
acctgcttgg gctgccatgg ttggcaactc cctttgctta agtgctgtgc taatcaacac 120
tgtaaatt accgctaaaa cgtaatttcg aatttaaact taaaattata aagtgcgttc 180

44/586

aattcgttcg ttttatttat gatagcattg tacctgcaat ccacaaagta taatattcgg 240
agctgtaaaa accctacgga ttataagaca aacctcaaat aggataccta taagtgtat 300
acctgatcct tattgtgtcc agatggtttc catccttgat taccagacga caattagggg 360
attcgttagg tagcccaatc gcaaccgat tacctggctt acaactcttt ttttttggg 420
taaataaggc gggcaa 436

<210> 61

<211> 645

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (46) .. (176)

<223> Area matching *Drosophila Aef-1* gene, Acc. No.

M90755

<400> 61

aaccagccac agataatgct gtgaggaccc gattctgata ggcgagagca atacgcgaac 60
accctccgaa aggcccatat cccccaaaaa ccgaatcgag tgcgaaaaaa tgatgtaaaa 120
cggggggaaat ctaaacctga aaggccccac acagcacagc cacaaaatgg aaaggtaggt 180
caatgtgtgg gcgcccgaag agagttcaag tgtgtcactc agtataccca attccgtctg 240
gaatcatttg gcaaaaatag cgtttataga cgtgtgaaaa acaatggaca tttgagctcc 300
aaaattaaaa gtatcctaac ctcaaaagag cttttacaca gtacgtgtcc gtgtgtgcgc 360
tagtgatgtc catacgtgtg tgcgactgaa agtgggtgtg acttttagct gaagaaggga 420
gcgcgagggg cgatctagag gcaacgtgtt agtggaaaaa ctgcttttga aaaaagggga 480
aaatatcccc caaaaagccc gcccaaaaaa ggctcagttc gaatcctgtc gatctgcct 540
cgttgagatg tatccaattg gtaaagttat cactaagttc ttaagttgcc agaaaaacac 600
atgtaatttg gcgagaaagt aacacgctgt caattcaaca caaaa 645

<210> 62

45/586

<211> 445

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (224)..(298)

<223> Area matching Drosophila EST AI292767, this EST
matches Drosophila serine/threonine protein kinase
gene, Acc. No. Y07908

<400> 62

gtctgccccca gcacctaaac gtaagtgtgt gcgtgcgaga gtcgtttcat ttgcattctt 60
gttttagcgca ctccctctct ctcttcgtgc gtttttcatt cataagcaca tttttactat 120
ttggaactgc aattttttac actaagcttg aggacagaca agaatactgt gaaaatccaa 180
tgtagatgaa agcaggccgt gctttttcca tcaaagtaat cgcaaaaagt cgagattaac 240
acaagttcaa aattattcgt taaatttttag aacagaattt tgaaatgaac ataattcagg 300
tactgtgtca tccacatata aagaactttt attctaaaaa caaataatcg tccgatcggt 360
gtggtctgtc caataaaaat tcacggcaaa ggcgttggtt aaaaatacat agacaaacga 420
gtcgggtaaa aaacaaatac atgat 445

<210> 63

<211> 531

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1)..(531)

<223> Area matching Drosophila Fascilin 1 gene, Acc. No.

M32311.

<400> 63

gtccgtggac attgcataat ttctgcggcg gccgttaatg ttaattcctg cagcccagagt 60
ttccgagaat tacgcagaat aaagaccaga gagaaaacta taaaatcgaa aacagaaaaa 120
agtgccgcag cagcgaaatg caaaggcgca taataattaa acacacagcg acggaatgaa 180
gaaaaaataa tacacaataa gcgcagcttt gtttctagtt aaattgcgtt tgtgttgtgc 240
ttgccgtttc ctccgtgggc cgtttttcgc ttgttgttct atgtgacata acggaactct 300
gggcaaaagc gaacaggaag cagcgataac cttgcaaaaa caaagaaaat accaaggagg 360
acaaaaaagc atgccaagca tatatctgtg aaataatatt ttcttttccg aggaaatgct 420
gtttgtcgtc ggctaactgt tgtttgcctt tgaattgcag atcttaatcg tagagcagca 480
ctcacaccag cacacgcccc ccgcaaaaaca gcacacacag cacactcaca a 531

<210> 64

<211> 421

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(421)

<223> Area matching *Drosophila* HSP23 (inverted), Acc.

No. X03889

<400> 64

cacgaaactt ctccggctga aaatatcgca gagttctcga atttgccgca attacgcatt 60
atctgccatt gaaagtgaga gtatcgctat ggaaaatgag caatctccta ggggagtggg 120
aatgaaaagg cctgggtggag tgataagtcg catcagcacc ggcaaatatt atgtgtatgt 180
atagatgtac gtatgtaagc acgtatgtat gtacatacat agcagatagg aagggtggag 240
tatattccac gaaggatgga agtaaatcgc cgaaaacttc gagactgcag aacaagtctt 300
ctttttatgg cctggcattt aagctattaa ctttaattaa tatccaagaa tggggctctg 360

gtagtgggga aatctaatta aaatcataag tggttaatgc ccgggtaggt aataaccctg 420
g 421

<210> 65

<211> 882

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (548)..(882)

<223> Area matching *Drosophila* ATP sulfurylase gene

(inverted), Acc. No. Y12861

<400> 65

cccgacacta aaacgcgtta agcgaccgca tgttccaaga acttggaataa tttccaagat 60
atgcagctga taaaacagct gatagecgtg ccaacttata gcagtgggcg atcttgcat 120
caacgggtgcg atcgggtgttg agttgcgacc gtttggcgcg aaattcaaata ttaaattttt 180
tatttaattt gttactatta ataataataa attaatacaa tacgtgacga tgacgatggt 240
gatgatcgtg cccaacggca gcagacccaa ttgtaaaaag ttgtaatggc agaagcataa 300
gtctaagtac agggctccac ctgacactgt ttcgcacttc tggggccccc tgatatttaa 360
aaaaatttta ctttattaac tcgatatttt tatgcattta attatcagga aagcatatta 420
acacgttctt ggatcagttt aattatttca ccgcacgcat tgatctttct tgggtatactg 480
ggtcgtattg ttcatagaaa caatagctgt atgggaaatc ctcataaccg caaaaaatac 540
aatcagttca ataagtaatt ttctatttta ttatttatat atgtattaaa aaccgtccac 600
aaaatagctg cacgatattt tgcttaagat aaaaagaatt gggtgactta agttagata 660
caagtagatt gtacgatacg aacatttagt taggaggagc acaacattca cacacgggga 720
cagccacgga tttcggctta gaacaatgga aaaaagatgt ggtaagtggg aagcgccttt 780
agcttgaaat atttatgtat aataagcaca cgagctataa ctaggaggaa ttgcacgttg 840
cggatcgagt gtgagcagcg gggtacgact gcggcaggtt ct 882

<210> 66

<211> 569

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (83)..(135)

<223> Area matching *Drosophila Nemo* gene, Acc. No.

U12010

<400> 66

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ccccggcgcg ttttacttcc atctcgctcc cacaaaggcg gaagagttaa acacaaaaaa 60
aaaagaaaaa tagaaaagaa attataaacg aaaaactgcc accgccgctg ctcaataatt 120
tgtgcatttt ttaaggtaat ttaaagtga atggaatgtc ttgtttgcat aggttagggt 180
taattagtcc ggaaagctaa gcgaaaccct gggaaatatt acatatcccc gggcgaattt 240
cttttgtccc gttacttttc gattttcatg cgagcggttt ttgattgctg tcattttctg 300
gcgacttggg ggtgctcgcc attgtttggt tttttgaaca tttgtaaatt tgcataaaaa 360
gtcggatttt aagtgatatt ggtgtctttt gagcggtttt ttgcgcaggc agcgagtc 420
gaaaatcact cagaatcgca ctacatgcg cacacactta caattgtaac acacggacgc 480
gcccccggtc gcgacagcta accggcactt tttcatgtcc tctcgcgcg tctctctcac 540
tgctctcttc tcttctttct ttttgatcc                                     569
```

<210> 67

<211> 500

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(357)

<223> Area matching *Drosophila* UDP-glucose:glycoprotein
glucosyl transferase gene, Acc. No. U20554

<400> 67

```
aacagggcca aaaccagctg aaaactggtg aaaagtaaaa catttgga aggaaagcct 60
taagtctctc tctacgtctc gtacacgtaa tgtgcgtggt ttaatctacg ttaaaacaag 120
tggaaccat gttacgtgcc gtggctttgt gtgtgtcagt ggtgctcata gcactatata 180
cgccaacttc tggggaatcc agtcagagct atcccattac cacgctaate aacgcgaaat 240
ggacgcagac gccctatat ctggaaatcg ccgagtatct ggccgatgag caggcggggc 300
tcttctggga ttacgtttcg ggggtgacaa agttggacac ggttctcaac gaatatggct 360
tgtgtttata agtcatggga gaaccgcgat taaagagctt ttatattctc ctcaatgtga 420
atcgaatcca tataaaatca agtaatgggt cggaatataa aatccctatt ccaaagccc 480
tataacgggg acctttccca 500
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<210> 68

<211> 469

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(20)

<223> Area matching *Drosophila* Cbl gene, Acc. No.
U87925. This association is confirmed by overlap
with *Drosophila* EST AA441040.

<400> 68

```
acccacacaa tattttcgac tttttcaatg aaatctcggt atgaccgcgg ccgcaacgcc 60
agtaaatacc aaacgagctc gcacggctgg tcacactgat cgaagggttg catttcgctg 120
```

tgacgtcatc gttgacccat gtaaaatgcc gttacaaaat ggcgagcttt tgaaaaaatt 180
cgttacaaat ttattaaatt aaataaacta atttttaaaa taatttgaat attcattttg 240
ggaatatgtt tagaaataat agacttacag aatataatct attggtaacg attttctttt 300
tcacagtttt cctcctcgaa agggaagtat tttaaattgt tattacacat gggggaagt 360
gctgcttggt taatgaaatt gtgttaaata tatataggga aatgctttta atctactttt 420
tgtaggaaac ctttcatgaa aatatgtgga atctcacgtt ttattaaat 469

<210> 69

<211> 539

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (468) .. (539)

<223> Area matching *Drosophila* EST AA392994. This EST
matches *Drosophila* Guanylate cyclase gene, Acc.
No. U23485

<400> 69

ggcagcgta attactgttc tcatatcatc tccgagagca cggaaatcag tgatggcaag 60
tgagaggagc aaatcttttg cggtatgcaa aaaccgctaa gtgtgtggca gtcaacgcta 120
cttttcttag tatagtactt agttatacct tttatcgtgc aattttttaa tgaggactat 180
gtttttccaa aatggatctg ctcaatataa tttgactatt tatcttttaa tccattttaa 240
cctagtttta aaaattttta aaaagtgttg ataatgtatc ttgatggata tctttcggat 300
atcctacact gagcgaaact aaaattgttt gataaagcgt cctcatatgc ctaccttaac 360
acagtgaaaa aagccaaagt gccatctctg ggagcatgcc ggtgtcgtc gcccgatttt 420
cgtttggggc tttcagtatt attctattcg cctgcgcccc aagttgtttt tttcggatcg 480
gcaaagcccg cgtgcgcccc atcgactct cgcacacaca catacgcact ccagaaaac 539

<210> 70

<211> 547

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1) .. (547)

<223> Area matching *Drosophila* UbcD4 gene, Acc. No.

Y11349.

<400> 70

```
gacgtgctga gcgctgtaaa aagtcagatt cgtgttgaaa ttggaataat aagtttttta 60
ttttccgtgc gctggtegag ctcgttgctt cgacaattcg aaaagcgatc gaaaggagca 120
accttgtagg ccaacagcca ggcgtaattt acgcaacgca caacactcac aaaatccaaa 180
attgcacggg ggggcaacaa taaaaacaga ggcagaacag aacacagcaa gaagagcgtg 240
gtgaagagga gcggcgagga aaggagaacg gtgaacaggg aacagggaga gagcagaaag 300
gagagtccga gaaacggagg aaacatcatg gcgaacatgg caagtgtcgc ggatcaagcg 360
gggagttcaa gggaggtgat gcgcagcgag ggaggggtgag tcccgagcac caaggcccg 420
aggacactca aacggcacct cggcaatgcc agcttgcacc accggccctg gtcatgggtg 480
agggggcggg ggaaggggtg ccgcgaacgt tggtgggcgt ttttggcgcg cttatggctt 540
ccgttttc
```

547

<210> 71

<211> 563

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1) .. (163)

<223> Area matching *Drosophila* SNAP gene, Acc. No.

U09374

<400> 71

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cacccgctga aaagccgaac aagtcttaaa cttagatgca attagtgccg aggcggacat 60
aaatcctcga catgggtgac aacgaacaga aggcgctcca actgatggcc gaggcggaga 120
agaagttgac ccagcagaag ggcttttctgg gatcgctggt cgggtgcgta tcaaataaaa 180
gaagtttcgc aatttctgtg ggagtgggga aatggaagct gtgtctggtc tagcctagca 240
tctccacaac cccacaaggt actgagccct attccaagta gcacttggat gccaattcac 300
tatgcttact actttgtttt tatgtatata cccactcacc ataatacgta tacgcagttg 360
tggaactctac gcctccaccc agaaaggaga agaaaatagc gcaaaaagtg cgacttacag 420
aggataagtt tcagatatga agaacacaaa gtgtgcaaaa tgtcgttaaa aaatatcccg 480
tagtacataa tatatgtaca ctatgccatt cgtaccaggt ttcgatgaat catagtgcc 540
aaaagtcaat cgtgtaaaaat aaa 563
```

<210> 72

<211> 594

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(104)

<223> Area matching *Drosophila* Caf-1 (inverted), Acc.

No. U62388

<400> 72

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gattgagtcg aatcctggcc gggaacttac actttaaacg gcgtaacgtc agggcaaaaat 60
agaaattggc taatttcctt cgtttttttg caagcgcgtc gtcgatgata gagatgcaat 120
gctaaagatt gtcgagacga ctgccatatt cgattacgat aacgataaca gagttatgga 180
gatgacactg cgcggtatgt ttatacttgt tacgttcctg cgtcatgatt ttagtatattt 240
```

gtgggtttaca tcgatatatt tgggggtttta aaaggtatat tttaacgggt gcagttgcgg 300
gcacactaaa gtgcataaac aaagtttact acttaattcg ttatcagtgc gaatgattcg 360
aaaccagttt acgcgccaat gaccggcttt ccattcttat ttgacgagcc taacgtgcca 420
gttgacagtta agttccccaa ccgcaacgac ggtgggcagc cgtgattcat cctcaacgct 480
ttttttccaa ttgtgtatgc aaaatgtttt tgcacgtaac gagctgaact attgagtttg 540
ctaaatagtt taacaagcaa taatttggcc gacatgcagg ttgatggttg acca 594

<210> 73

<211> 583

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (374)..(518)

<223> Area matching *Drosophila* Elongin B gene

(inverted), Acc. No. AB007692

<400> 73

ggttagggta aaattaaagc cgaatattat caatcccatt ccaaagttca attttgtgtc 60
ggaaccatag taaattaatt gttccttgct attaacaacg aaaaatgcat atttagctat 120
tgcagttgag acggcagcta ttgcttcttc accacgctgg gaagttgaga atcgcagaca 180
aataaatctt cctcctcctt cgtccgggtcc gaccatcaac ttcgatttca atttcataca 240
tttcgtttgc gtgggacaag cgagcgacag cagtctctgg agttagcggg tttattttgt 300
ctcgatttgc tgctgctggt gattttgatg atgtgtttgc tgctgtttgt tgttctcgta 360
ggggtgattg actgactgac tgctgtggct gcacccctat gccacctgct cctgggtccgt 420
tcgaggcctc ttgggttttt catgacttcg ggtaagtctg ggtggtgccg agtaggggtg 480
tcatgtccca gtgtctcaaa gtcgcccacc tcgttcctta aagacagata gctatgttgt 540
actactacgc tgaactgtaa gcttgtaagc ggaacacgtg ccg 583

54/586

<210> 74

<211> 589

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(231)

<223> Area matching *Drosophila* TAF110 gene, Acc. No.

L06861

<220>

<221> intron

<222> (232)..(401)

<223> Probable intron.

<220>

<221> misc_feature

<222> (402)..(589)

<223> Area matching *Drosophila* TAF110 gene

<400> 74

gtccgtgcga gcacgcgcga gtgtgtgtgt gcgcaggaaa acccgccgat cgggaaaagt 60
gtagaaaggc ttagcggcgc aaacaaaagg cagcgaatta gcgagataac acacacgcga 120
caacgactgc aacggatgcg ccaggagaaa ggccgacgac agtgacggca aaggcgagtg 180
cgagtgcgcc agcgcagcac caattcagcg gagcaccgcg ttttttggcc aagggtgaatg 240
cgattacctg tgcgcggcat ccagggtgtac gcagcatctg gtttatggcg cacggccgcc 300
aggtagccgg cggtcaggta gcacctccac cgctacctg tttctccacc gccttgagcc 360
gaatcttgta taaatactaa aagcgcctcc ccttgatttg cagttcgctt ctggagcgca 420
caagcatgca acaactccgc caacaccaac acagggatgt gcgcaactag tttgatcgga 480
acaaggatcg cttgcccaca ccaacacaca gaaagtcagt ggaataggag aaacacactc 540

gccataaca taaacaccac acagcacgat gaacaccacc agacagctt

589

<210> 75

<211> 314

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(314)

<223> Area matching *Drosophila* genomic sequenceAC005641. *Drosophila* EST AI259618 matches this

genomic sequence 40bp 3' to NPS0081

<400> 75

gtccagcctc gcactcttcc tccagggcgc acggtctcac agaactgggtg gccggcggtc 60
acactggcgc gcagcaagat ggcttggtta caccaacgcc tatcgatgc gaatagtgac 120
cgtttagact agccagattg tttgtggtat gagcacatat tttattataa tacataatag 180
cttataactt atttatctag cttataattt gtttacagca cccaatacac aatatatcgg 240
atgtggagcg gtgggttatgc gatgcgattg tatagtggat cacggctatt ttaccatcga 300
catgtaaaga attc 314

<210> 76

<211> 591

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (509)..(591)

56/586

<223> Area matching Drosophila EST AA202837 . This EST
has sequence similarity to hypothetical genes from
yeast and arabidopsis.

<400> 76

atttaggccc tcgagaagga cgcacgcctt gcacggctgc tgtgaggaaa cgaagccaca 60
tcgggtgcat gtgccacgct cgggcttctt taccgtgtcc ttgaagcgaa gctgttcgcc 120
agagtagatg atgtccatta taaccgatgg tcgcactttc tccaaatcct tgagaaacgc 180
tcgagcgtgg ccgcgatacg cattgggggc gaatacgcac tccgttgaga agtagaccag 240
ctttttgtag tgggcgtaca tcacgatttc tttctcgtag ctgtacttga ggggcttcac 300
tcggggaatg gtatcctcgc ccccgccggt gcggatgctc gtgcagcgtc gcaggcgcgc 360
cgtgtcccca cggagcacgt tcatcaagac agtctccgca atgtcatctg cattgtggcc 420
tgtggctatg ctatcaacgc ccaacagctt ggcccctcta tccaaggcct gtcggcgga 480
gacccgcaaa atgtgcagtt gttagacggg ccgatctggg caacaatgcg gtccatggtc 540
cagccgtaaa cttctttag gacaaggatc ttagtgga ttgggtaatc g 591

<210> 77

<211> 617

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (166)..(393)

<223> Area matching Drosophila EST AI293734

<400> 77

gcttagatta cgatctcaga actgagaacg tgggagagag agcgtgatag aggtaggatg 60
agggagtgga gccccgagag agactctctt ctcttgccca ccgatatcta atcaaaacaa 120
ataatgcttc agtccacggc ggctttactt gattcatata tttagttcta tactgcgagg 180
catgcagtac gcttgccgtg tgctgcgttt aaaaagtaat aagtaaagt tctggataaa 240

aatttaatatca aaagacaaat aagtgcaga acaagaaact caaaagatat aagcaacata 300
actcgaaatt cagtacgcct gagttggaaa acaccgaaac cgaaactcaa atcgaatcta 360
catataaccg ataccataat gaagcacaaa cttctgttgt tggtagtaaa atatttcagc 420
catctaaaac agtatcccta tcttatcgca catactttgg gctcagatag tggggatcag 480
agagtgtttt ccgttaagct cttttctgaa tgtgcccaag tggggagacc tttttatgaa 540
gccatgatg accttcttcc ggacgggcag ttggcccaaa aaaaaaccac caaattagga 600
tgccatatag gtatcga 617

<210> 78

<211> 396

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (261)..(377)

<223> Area matching *Drosophila* EST AA202757 (inverted)

<400> 78

gtacagaact acttcatgcg ctgggattaa cagcactcat tgcgcataac agcacgctgt 60
tagttttaac aggcgacaga ggtgcccaaa caaactcaac atttttgcat gcgcatacac 120
acaagcatgc atgtatgtat gtatgcgttt gtttgtatgt atgcctttct ctcgccatgt 180
tacaaaaagc aagaagtttt tggcaacgac aatgaatgaa aaattgaaat ggcgattgc 240
aaatgcgaat tgcgcttacc tgcgtcgtg cctggccttc ctttcgcgac agtggcgagc 300
gaaatgcccc cgtccgcccgc actcgtagca cttatcgctc ccacgaccac cgccgactcg 360
gaccgcgtcc tccgagttct ttcaccacca accgcc 396

<210> 79

<211> 586

<212> DNA

58/586

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1) .. (247)

<223> Area matching Drosophila EST AA696498

<400> 79

agcgggcctt tctgcctctc tgtgtgcttt tgaaaaaagt ttgcttgaaa aatgtgtaaa 60
gaaagcggcg ccgccagtga gtgcgtgtgt gtgtttttat gtgtttgcaa atacaaaggt 120
aaaacagccc caaaggcaac aacaaagtgg cggcgttggc ggctatagcg cagtagcagc 180
gacgcagcgg agcagcagca gcgacgtcca gtgcattttg gtgcaaacta attgttggtg 240
tgagaggtac gctatactcg tatgtgtatg tgtgcgagtg ggtgttagtt gcaggtgtgc 300
gtgcgatttg atttgcatth atgttggggg tttgttttca tcttttcac aagtaataata 360
aactaaataa atgaactatg tgtggaaatc atttaataata tatataaata aaattagaaa 420
gtataatatg aacatgaaag ttaaagttaa aatccgtagg aaatcaacaa aattgggtgaa 480
tattaaaatt aaacaaattt tccgaaaaac cgccacacaa ttccagcaaa agccaaagta 540
aaacttaaaa atcatattta ataaacagca ttaggggact ggttgg 586

<210> 80

<211> 646

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (100) .. (646)

<223> Area matching Drosophila EST AA950073

<400> 80

gtacaggtgt ttttcgaata gccggcactt tgatccaagc tgttattgcc atctccttca 60

aagttgccta tcgatagggt tctcaactag tccacgtctt ctacttgcg tttttctttt 120
tgtaaaataa gaatgacgct ttaatgttgt gttaaaccatg caattaccta gagcgacta 180
actagtatag catcagttag gtcaattgtt acctgtaggt gtaaagttca agccgcctga 240
tgtggataac cggtcagttt gtttttttctg tgcgtggtggc acttggtgcc gcaaaatcga 300
aaacctcggc ggtgcaggat gacatcgcg agtataagga cttcaagaag ctgctgcgca 360
ccaagaacaa tgcctcgcg ctctacgtga ccagtgcgaa atccgctgct gctgagctaa 420
agatattccg tgaggcgcg gaggcgatac ggggaaccgg gacaatgttg ctgctagatt 480
gcggacagca ggatcgcaag aaactgtgca agaagttgaa ggtatcgccg gaccctacg 540
ccattaaaca ctacaaggat ggcgacttcc acaaggacta cgaccggcag ctgagcgctg 600
ctcattgaca ctttcatgcc gtgacctcc ggcgaattgc ctggga 646

<210> 81

<211> 655

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1) .. (50)

<223> Area matching *Drosophila* EST AA695104 (inverted)

<400> 81

gttccgtgct ttcaacattt tccgcaatcc gttgaaaccg gcaaaggcaa actgattaca 60
tgaaatcata tgtttctgcc ggaatatcga taacggactc tgtcttttgg cgccgcaggt 120
tatcggagtt taaattgtga taaggatgca aagaaagttg gttcttagat gttacaatca 180
atttcacaac ccaatctttg cattgttgag ttaggatcat cctctagcct tacatctttt 240
gccatttagt tacatcatgc aattgttcat atcttcaacc aaatccatat agaacagatc 300
ccctgtttat atattttttt atacgtacag agttgtaact aaatcctctg agattctgtg 360
gaatggctta ttgctagcgc taaatataaa caggaaaatg gggtcattca ccagaattt 420
ccatcgaaat tgaggctgag acccattctc cttccccac cagaatttgt ttaggaaccc 480

60/586

ccgtgcatcc actattacgt cgctttatct gtagacaact tttgaaatca agagtgttaa 540
gtacattagg cgggctgaag tggttatccg taatggatac ggctactact attgggtaca 600
gcgatctaaa aactacaggc acgccctaaa tagcgaacgt atgggtcaatg aattc 655

<210> 82

<211> 601

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1) .. (427)

<223> Area matching *Drosophila* EST AA942153

<400> 82

ttttgaaaca tattcagtca ttggcaatgg agttggtgaa acgcgggttc ctgcgtgcgt 60
gcaagaacca cagctacctc agcttcgagc tgatcgatga tatcctggcc ccgctatgtg 120
ccaaccacaa gactacaaag cccggcagca aggaggcgat tagggcactg gtggcggaga 180
ttaatgacac catcagcgac ttgggccagt tgctggtctt catcaagtat ccggtcaagg 240
ccgaggagta cctgggtttac gccaaagacgg acgctacgcc ggacagcgtg gccaacaccg 300
ggctcactgc cgaggagtgt cagtactttt cgaaactgct ggacaagatc gcctccgagg 360
aggactgcca catcgcttg aatgacgctt acaatgatata cgtcctacag gccagctcga 420
agccggttgaa gaagagccgc atgcaggagc tgctccagaa gtggatccaa atgggctact 480
tcatggaggt gaccgacaga atctacctag gtccacgtag cctcgtcgag ctcaagttct 540
atctgagctt gaaccacgcc gatacataaa aaatgcacgc ttgtgcaagt gcctgggtgtt 600
g 601

<210> 83

<211> 543

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (42)..(334)

<223> Area matching Drosophila EST AA540352

<400> 83

ggtcgggtct tcaatgtcac caatcactat cagttaaacc gtcgagtga tcacttcaac 60
atgcccagtt tcaaggataa agttataatc gtgaccggag ccagttcggg aattggagcg 120
ggtacttcgg tgctcttggc taaactggga ggctgtctca ccatcgtggg caggaatttg 180
gataagctca acgagaccgc ggagcagata gtggcagctg gaggagcgcc agcactccag 240
gtggcggcgg acataaacag cgagtcggac gtccagggca tcgtatccgc cacattggcc 300
aagcacggtc gcatccgacg tgctggtgaa caacgccgga atcttgagc taggcagcat 360
cgaggacacc agtctggagc agtttgacct gcgttatgaa cacccaacgt ccggtcgtc 420
taccagctga cccacctggt cacaccggag ctaatcaaga ccaagggcaa cattgtaaac 480
gtgtcttagt gtgaacggca ttccgttctt ttcccgggag tttacatac aatggttcag 540
tgc 543

<210> 84

<211> 162

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (115)..(162)

<223> Area matching Drosophila EST AI238523

<400> 84

tatccgccca aatgaagaga agctactctg tatttttgtg ctctttgtgc ccgcctcttc 60

62/586

aagtcgcttc acgtcgaggc aagtcagcag ttcagtcaca tttagacatc cgcgcggtaa 120
accgcgtttc ggcggtataa cgagattttt tatttcgaat tc 162

<210> 85

<211> 526

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(69)

<223> Area matching *Drosophila* EST AI260872 (inverted).

This EST has sequence similarity to mouse
signalling factor U29156.

<400> 85

gcttggcgca ttgcggcccc taatttagct actctcgaat tttaaaaagc ctaaatttgc 60
ttttttgctc ggtggatagt gtgaccgttc ggataacgat taaaaatacc gtacggctga 120
tgattaagta taccactagg taaaatgcgt taaaataccg cataaattaa taccgttaaa 180
ttaacgaaca ttattatttt tttaaagtat aattttttta aattcatttg tctatattta 240
ttcctttaac actaaacgtg aagaaaattg tgtactttga aacggacggt gcagaacagc 300
agtagcttat aaaaatgcaa tgtttcccggt taccctaacg gaacagataa tgtttaaagt 360
ttaaaatttt taattctaatt tcttctttaa atggagtata tttcctgtat gggatctctt 420
accttaagct aggaccttag agcagaccga aggcggcaat tggggggccc gccttgggca 480
gtacaacacc ttgccggcac cagccaact tcgtaattgg agttcc 526

<210> 86

<211> 568

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (5)..(77)

<223> Area matching Drosophila EST AA801728.

<400> 86

```
gtctgtttca tggcgacacag ccagttttcc gctctatcca tgtggcctca atggcgtaaa 60
tgtagtcggc tggtttttct ttccaccagt tttttcttgc gaccgggtat ttaaggtgta 120
tctaaatacc gttgaaggcg attgcatatt caaaagctat tacttccctt attaaaatac 180
atacgtgcat acatattatg tattaatttg ccgctcgtaa agtaaaagac gactcgtcga 240
cttatcaact gttggtgcct ttatttacgt aactcagagc accaagcagt tgattcctcg 300
catgaagcgc tctccttgaa ctaaaactag ttgtcattca ttttgatagt gttggttgtt 360
ctatgtttga gtgccttaga gcttatgctt ctgatctttc ttttgccatt ttagctatct 420
tccctgagat tttgtgattc cctatgtcta tgtattcgtg catttacgcc aaaagtgggc 480
ataagaaaaa atttaaaatc aagctttcgt attagcaata agtgccatgt ggacgtactg 540
gacttggaac acacagtctc ttcattttt                                     568
```

<210> 87

<211> 675

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (228)..(675)

<223> Area Matching Drosophila gene SMT3, accession
number AF053083

<400> 87

```
gtccagcacc agtttttttg gcgtgtagct gtagcagaag caaaaggaag ccgcttgtga 60
```

64/586

taaatttcaa cttccatcag caagcactga atttgaggaa atcaggtaaa tttttgcatt 120
tctacgcgat tagttgctgc cccgcggtat tgtgcttagt ttttacgtgt ggtttaccaa 180
tttccgcgta cttaattgga cattttgcct cgtttttttt cgtacagcac gcccggcatt 240
cgacgctccg caaaagaaaa aaaaaacttt tttgaccact tagcagcttc aacaagcaac 300
caaaaaatca acatgtctga cgaaaagaag ggaggtgaga ccgagcacat caacctgaag 360
gtcctcggcc aggacaacgc cgtcgtccag ttcaagatca agaagcacac acccttgagg 420
aagctgatga acgcctactg cgaccgtgcc ggactctcat gcaggtggtg cgcttccggt 480
tcgacggaca gcccatcaac gagaacgaca ctccgacctc gctggagatg gaggagggcg 540
acaccatcga ggttaccagc agcagactgg gtggcgctcc ataagaatac ttagttaagt 600
tagttacttc tcttacaact accccttaaa acgaaaagaa aaaattcccg aaaaccccaa 660
agcaaaacac accac 675

<210> 88

<211> 210

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(210)

<223> Area matching *Drosophila* EST AA439866 (inverted)

<400> 88

caacggcgga tccttaatac gaactaacgc gcacacgact ctacgctttt taccgctatt 60
tcggctacac agcggtttct gttttcggtt tgcaataata ttctattctg aaagcgcaga 120
tgcagcggac aaggagaatg tggatgatta ctgttaggcc agtgatctcg aacttgcttc 180
caaatcggat tcgaagtgtc aaccgaattc 210

<210> 89

<211> 590

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (31)..(590)

<223> Area matching *Drosophila* EST AA820803. This EST
has some sequence similarity to to human aldolase.

<400> 89

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ggctgtgcga gccaacagtt gtccgcgaag ctttcgacga gctggaacag atagagattt 60
gatcgcgaga aaggcgtagt agcactgggt tagacttaga agcgtccaat ttgcacagcg 120
ttaattatca gcgccagaga caagatggcc aatctggctc ccaccatccg gctgaacaac 180
gggcgcgaga tgccaactct gggccttggc acctggaagt cgttcgagtc ggacgcctac 240
cactcaacgc gccacgcctt cgacgtgggc taccggcacc tggacaccgc cttegtctac 300
gagaacgagg ctgaggtggg ccaggcgatc tccgagaaga tcgccgaggg agtggtcaca 360
cgcgaggagg ttttcgtgac caccaagcta ggcggaatcc accacgaccc tgcattggtg 420
gagcgcgcct gccgcctgag ccttagcaac ctgggtttgg aatacgtaga cctctacctg 480
atgcacatgc cgggtgggcca gaagttccac aatgacagca acgtgcacgg aaccctggac 540
tgacggacgt ggactatctg gacacctgcg cgagatggag aagctggtgg          590
```

<210> 90

<211> 478

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (30)..(478)

<223> Area matching *Drosophila* EST AA803545. This EST
overlaps EST AA697132 and has sequence similarity

to frog/human MSS1

<400> 90

gttcagtcac tctcgccgta aaacaaaagg aaaacatcgc ataaactcat tttttgcctt 60
aaaaaccgta caattgcaat cgaataagat gccggactac ctgggcgacg accagcgcaa 120
ggggaagcac gatgagaagg aggacaagga gatcaagtcc ctcgacgaag gcgacattga 180
gcttctaaaag acttatgggc agagccagta tcacaaatcc atcaagagca tggaggagga 240
cattcaaaaag gctgtgaagc aggtgaacga gctgactgga atcaaggaaa gcgacacggg 300
tctggcgcca ccagcgctct gggatttggc cgccgacaag cagatcctgc aaaacgagca 360
accgctgcag gttgcccgat gcaccaagat catcaacgcg gattccgacg accccaagta 420
tatcatcaat gttaagcagt tcgccaagtt cgtggtggac ctactgactc ggggtggcc 478

<210> 91

<211> 574

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (76)..(178)

<223> Area matching *Drosophila* EST AA438591

<400> 91

ctctgaacag ttcttagact attgaagcca agccatcgat tgtgccccgg catatcgata 60
ctaccaacat ggccgtcgag aaaaattgaa gtgaacgcaa cgccgtgttt ttcatttgcc 120
aataaaacgt taacagctca cgaaatatcg taaagcgtgc ccgcaaacgt cgccaaatgt 180
aagcaaatta ttttagtgcc tgttttacat cgtttacata attgccagag ctgaaattcg 240
gaatttagtt gctgccgtcg ggagtatcgc caacttttgc ctcacactct ctctctgtct 300
cgctctgcat tcctctcgtg ctgacaaggc aaatatattg gtgctggtgt gagggtatgt 360
gtgaaaaatg gaagaaattc aaaatgcata tgtgaaaaga tatacgcgca agccgattaa 420
aaatcggctc tctcgacga ttttgattgg gaccacaggt ccccgacccc cgcggcgtga 480

67/586

atggggttaaa tgacagccgg agcgcgtccg cgattctctc tgcgttttca ggtctctcgc 540
tctattccat tctgataact ccgctcctga attg 574

<210> 92

<211> 169

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1)..(169)

<223> Area matching Drosophila EST AA979551.This EST
overlaps EST AA567400

<400> 92

ggttgtgtcg tcgaacgtga aactacgcgt ctccgcgaat gacgcagact ggaagcttcc 60
actggcatga caatcgtcta aaaacattca acaatagcgg tgcacttgca aattactgtt 120
gccgcaacaa caataacaac tgcttcgcta agcagtagct gcgaccaca 169

<210> 93

<211> 414

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (138)..(414)

<223> Area matching Drosophila EST AA439261

<400> 93

68/586

agctgaatga taaacgaacg attttattaa accgtcacct tggttatcct caccctgaca 60
gcgcccttgg gcgaatggca aacagctgac gccatatccg cggacgcgaa tggcacattg 120
ctagtctctgt tttcttgctt cgcgtttgct gtttatcaaa cgccttttgg ctaatgggtcc 180
gcagtcagggt ggcgttatca cggaattgac gaggccgatg cgtcacatgt gcgtgggctg 240
catccggaca ccatgaacta ctctactcc gcgtgtcgc ccggcggtag cggaggattc 300
ggtggcggtg accagcaciaa ccgatgttgc ggaaacaagg cctggtgcgt caaggacatc 360
tgccgcattg tgtgcgtgat catgacctgg ctgcttatcc tgttcgccga attc 414

<210> 94

<211> 354

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (7)..(354)

<223> Area matching *Drosophila* EST AI107509

<400> 94

gtttgtcccg tttgctcgag cacttggtcc caacgtaagt ctgaaaagac ttattttccg 60
agataataaa tcgccgtggc tgcgcattat gtaaagtggg gtgggtccgt gccgatttcg 120
ctgcgttggg gccgttccaa acatatggaa tctaaacgca gcgtatttca ctctgccccg 180
tgtgtgtctg tgtgtgttta tggttgtagt ggggcttccg tgtcgcaagt ggaaaacaaa 240
tgaaattgag ttctcgcttt gagtcatatt cgagtgcgaa ataaagcgcg ttatgcgttg 300
tccatcgaat tacccttaa tttgattacc agctaatttg gtacccccca agac 354

<210> 95

<211> 48

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(48)

<223> Area matching Drosophila EST AA540348

<400> 95

gtccgctcgac tacttgtgcc atttgttttg aatattccga gcgaattc

48

<210> 96

<211> 577

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1)..(311)

<223> Area matching Drosophila EST AA735555 (inverted)

<400> 96

gacacagctt ttgagtgctt ttatttcggt tttgttggtt ctctgcgtgt acttgcagct 60
ttagctctca attgttgctg ttgttggtgt gtgcgaggtc atcgacgcgc attagccgaa 120
aaaatcgata ttttaacactg gtcgcactag ataaaattgg ttaatgggtt agcttatggt 180
tgtcgattga caacgacaat gacaaataac tacagaaact ggagtttttc aacgcacaaa 240
cgcatataca aattcaataa ccgggccgcg aatcgaaaaa ctttccgctg acttggacgc 300
acgttggtgtc gcgagacgca atttttccaa atgggagctg caccgatgtg atttttggag 360
cccaccgaag cggcgctcgc tctcgtcttc tttatctttt tcttttctcc ccttctttcg 420
ctctgtgcgc tctctctttg cgcagactct ttatcgcttg aagtttttaa ttcggattcc 480
tttgcattaa ttatccaata gccggcttat atgccgtctt aagaggtctt ggatgatgtt 540
tcttcggggg gaagtgtgaa tggggccgtg taacaag 577

70/586

<210> 97

<211> 582

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(582)

<223> Area matching *Drosophila* genomic sequence

AC005646. ESTs AI064020, AI542218 and AI25740

match this genomic sequence 26bp 3' to NPS0118 and

have sequence similarity to Human SEC61

<400> 97

ctttggtggt ggcaccgctg ccgataggctc gtgacgctga ggtgacagct atcgtgcact 60
tagacagctg gagatgacag gctaaggcaa ctcaactatc ggctgctttg gctctaaaat 120
gaactagtaa aaaaaaacg aagaaataat atattcaagt tatgaattta atagataaca 180
ataatagata aaatattaat tctacaaaat gaattgttta aatcaatttg aatgaatcct 240
attaatataa ttggctatta ttaaaactcc gataataaat gctattattc ttgatttccc 300
ttgatttaat tatataatac atacttaata actatataat tatatagaat aaaaacttaa 360
tcacgcattt aatagatcat atagatatag aatatataga aaatcaatga aatcgatttt 420
gatagcgata atgtgcaacc ttgcatgtaa gttattttta gatttttagct gggcaagcgc 480
aattttcttg gcgcgcacca aacaatttgt aaataatatt ttgctcaac tggatttggt 540
tcgactgcga atcactaaaa atattaagtg acttaagccc cg 582

<210> 98

<211> 297

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (7)..(170)

<223> Area matching Drosophila EST AA263700. This EST
overlaps EST AA978721.

<400> 98

gtccagggtca tggcaacaca accgctgttc accgatcagt ttttattggt tttcaggaat 60
aagtaaattg gattattgaa ggcttcactt ggcacgtatt agcttggatt tctatacgct 120
caagctgcgc agtcttcacg ttgtgttatg agacaaaaat agatcgaagt gcgtgtgtgt 180
gttattaccc aaaggagttg tgttctttaa acttcgaacg ccaccgacat catcatgttt 240
ttcatctcac cgaattataa atagttgtgt gtcgtttggt ggtgccataa tgaattc 297

<210> 99

<211> 583

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (364)..(583)

<223> Area matching Drosophila EST AA941785. This EST
overlaps EST AA695548.

<400> 99

ctgggtgaata aaattcgcgt cttgtggaaa gtgaccagag tcacgaactg ggaaaacggt 60
agaacggtaa actagttcca ttctacgatg attatgatgc gatacatcga actgctttgt 120
tacatatcgc ttaaaatcgt gtcaatagaa aataaacggt ggatggcatt taaaaaatcg 180
gatttgaagc aaaaaaattt aatgatttca ttcgtttata tcatcaaagc cagaaaaatag 240
atgaccttac aaattaatct aatagcaata ccgatatatc gtgaccaccc tcacacgtga 300
cagctgtgaa catctgttgc acgaatcacc cactgctttc attcgtcgtc atgcgtcatt 360

72/586

cagtcgaacc gtgctgtgac aaattacgca atgtctaaca actgatgtaa aacaagcaat 420
ttaccaaaaca gttggccaaa ttccgtgtgt acacacactc cgatcgaccc agcgaggcac 480
tttaaccagc tcctgaccac ttcgagatgc tgcgcaaaac ggcaacgatg ggaatcatgg 540
cggcggttgc cgtaaagcg gctcccgagc cccagaacca gct 583

<210> 100

<211> 675

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(260)

<223> Area matching *Drosophila* ESTs AA802928 and
AA817115.

<220>

<221> intron

<222> (261)..(561)

<223> Probable intron in gene represented by EST
AA802928

<220>

<221> misc_feature

<222> (562)..(645)

<223> Area matching *Drosophila* ESTs AA802928 and
AA817115.

<400> 100

gtcacactgg caatttggtg cccgaagttg aattgccgtt ttgtgaagcg gatagttacc 60
tgccgataat cttaaataaa aatgtttaaa ctggcccgtg tgctcctgcc gcagcagcgg 120

atcctggcca gcccgctgcg cctgcaacgc ctgatctcta ccagcgacga ggtcaacgca 180
gagcccatca tcaagtccat ggacaccatt ggcggcctcc ccaccgaact ggtcaacgaa 240
cagaagctga agaagactag caggtaatca atctaccggt ttctgcactt gacctttgcc 300
ttgcctgttt gttttgttta catttcgacc ggtatgggca tgggcatggg atgcatgtat 360
cggaggcctg ttttgggcgt gattttcgaa aaggagtttc ggggtctttt tttcttgatt 420
tcaagtgggg gagaaagttt gtatcgagcc gcttatgcag tcacgtagac catagatgcg 480
tgcattgtgtg tgtgtatgta tttgtgctg cctggtgggtg tcagttatgg gctctattgg 540
tcttgacttt tggtttgtcc acagaacctt atcgacgctt caaaatcctt cggttcccat 600
tgccgttcgc gtcacgggtg cgaaagatga aagtccgact ttatggccgg ttccaggtga 660
aaattggtta ttatg 675

<210> 101

<211> 395

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(395)

<223> Area matching *Drosophila* EST AA539001

<400> 101

ggtcaacgta aaggccggag agcaciaatc cgccgagttt ctcaagttga atgcgcagca 60
cacgatcccc gtgctcgatg ataacggcac catcgtgagc gattcgaca ttatctgcag 120
ctatctggca gataagtacg caccggaggg cgatgattcc ctgtatccaa aggatccgga 180
gaagcggcgc ctggtggatg cccgtttgta ctacgattgc ggtcatctat tcccgcgaat 240
ccgtttcatt gtcgagccgg tgatctattt cggagctggc cgaggtgccc agcgattcga 300
gtggcctacc ttcagaaggc ctatgatggc ttggagcact gtctggctga aggtgattac 360
tttgggtggg cgacaagctg accatcggcc gatct 395

74/586

<210> 102

<211> 58

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1)..(35)

<223> Area matching Drosophila EST AA735863 (inverted).

This EST has sequence similarity to human death
associated protein 3, Acc. No. X83544.

<400> 102

gggcggagac tcgcgacagg ctgccaaagc gattccggat cattttcata gagaattc 58

<210> 103

<211> 621

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (68)..(195)

<223> Area matching Drosophila EST AA941860

<220>

<221> intron

<222> (196)..(474)

<223> Probable intron in gene represented by EST

AA941860

<220>

<221> misc_feature

<222> (475)..(621)

<223> Area matching Drosophila EST AA941860

<400> 103

```
gtccgtccct accagcaacg cgaaagggtt ttgtcttgct ttcttggtgc tttgtgtgat 60
tctcgagtct ctgttctgcy tctgcgtccc gttctcgtgc caacgaactg atttcgcccc 120
gcgttcgtgc tcaatcgtaa attcgaaata aattaaaaat gtctcgcagt tcgtacctgt 180
tgtgtgtgct gtttttaggt gagcgaaaga gagggagaag aaatgaagaa atcgtctcgc 240
gatcagattt tacggatacg catctcgtaa ttgcaggcgc cagctgcttg attttcagtg 300
cgagtgcagc gcggaacaat cgaaggggtt acaaggccac ggagccgccc accaccaccc 360
agcccccgca gacggccaag gagtatctgg acagtcgacc cggaatctcc acattcggca 420
tcategccat catcttcacc gtaatcggtc tctgcctcgt cttctactac ggcataattt 480
getaccocct actctgtcgc gatgagaaga aatatcggtt tatggaccgt atcttcaacc 540
attactgcgc cacattgcgc ttcatttaat ccatagagaa ctattccgac ccgaacacca 600
tcatacggtg gcctgattcg g                                     621
```

<210> 104

<211> 534

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1)..(210)

<223> Area matching Drosophila EST AA246460 (inverted)

<400> 104

```
gggtgcgcct tggcgtgggt gtgcgtgtgc gccgatgtgt gtgcacgcgc cccgtgtgac 60
```

76/586

gatgtgcagt ttttgcaatt aaatttataa acaaaacact ctttttcctt caatataatt 120
cacagacaca gacaccactg aacaaattcc ttagtggtcg tgcttctcgt tctctgacgc 180
catcttggtg gtgcgcaggc caggggtgtc gaggtgccgc aactgtctaa catgggcggg 240
cggagggtggc aacgctgtta gggctaacta atagtgtgac ccaatcgctt ggtattgtta 300
aattttccct caacgggtcat gctttgcata acaattcaca ttttctgatt gaagaatcct 360
tattttatgc caaaacttgt attagatata taaaatatcg agatgtctct atcgccagcc 420
agtggcattg gtcgttttcta tgccaagtcg gcaaaaatca tacgtttcgt acgcctggga 480
tgcaccaatc ggccttttta tcacattgtc gtcatggagg tgccgtactt tttta 534

<210> 105

<211> 593

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (66)..(593)

<223> Area matching *Drosophila* EST AA141928

<400> 105

acccatcctt aacatacaaa tattatcgag aaacttatcg actaatcgac tcgccactct 60
gcagagagcg cggcagtcag tcgctgttga accaagctaa aggacagatc aaaaataaaa 120
gagacacgtg aaattgtatt agaatattaa cttctgtaaa cggcgggctaa aatctcagaa 180
gtgggattaa taatccaaaa tggacgataa aatcatcctg aacgactttt cgctgacaac 240
cctaaaagat tggctacgta ttctgggcca aaatacggag ggcacaaaaa ccgaattaat 300
cgcgaggctg caagacatcc caacggcagt tcggggcgat tgtccaccgg agcaccceca 360
gaaaaacgct ccaccaggaa acgacatttt ttcttcactg ggattttcag aattgtgaaa 420
ttaacaccga tcacgtaaag tgtgaatggc gatgaacaga aaagaatcaa ccgaactggg 480
cagtgaagg gagacaaaca tgttcgagct acagcaacta cgcgagact agcagaagcg 540
aaggcatgct taacggacac gatcgacttt gcagttccag aaccaccacc acc 593

77/586

<210> 106

<211> 332

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(332)

<223> Area matching *Drosophila* EST AA979014

<400> 106

attgcgtgcc tggaaatcga acgtgtgtga atttaattta cgattcgtat aattatcagc 60
aagagcaaac aatataagtt gcaaacgacc gttaagccct atgacactaa gatccaaagt 120
aagtggctac caccgaactg ttccatttgc atttgaaacc agtttccagc gattcgagtg 180
catgaaattg tccaaaaaag tgcaacggtc gagttcaaca aaccgatcga ttgagataac 240
accgcaaata tatagcagtg aaactcgcaa ataaatacct acatattctt ctgataagtt 300
caagaacagg ctagccattg gttaccocggt ag 332

<210> 107

<211> 475

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (52)..(475)

<223> Area matching *Drosophila* EST AA817254

<400> 107

ggatatagtt atacgcgact tcaactgctcg ccgcggcacc tttccacctg cccgcaacgg 60 .

78/586

tcactttgtt gttgtcaatc gtttcgttcg catcgcgtcg cggaaaatcg agatataaat 120
acggaaaaca aagatataac tccgacgcgg cgacttccgc agcaagcaac tgcaatgcgc 180
tcgagttgag ggcgcgccga taactatgtg cgtgtgggag cgagtgcgag tatagcacac 240
aagtgatcac catcagcaat tagcaagtga ccaaccgacc gaccaatgag cacggggcat 300
tggcagcagc agcagcagca cggagggagc agcagcacct gggaactgag cgcggtattgg 360
aaggcgtgct ccctgcttgg cccgcagacc cgtcgaacgt cgataccggc aggacacgcg 420
ctaagcagcg actcacttga acgggaagcg gcgccgcagc ccggtatgtc ccagg 475

<210> 108

<211> 36

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(36)

<223> Area matching *Drosophila* EST AA536262. This EST
forms a 1209bp contig with ESTs AA948897, AA539274
and AA392320. Sequence similarity to glycogen
synthases.

<400> 108

cggctgccca tggattttct ttttgtttcc gaattc

36

<210> 109

<211> 614

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (475)..(581)

<223> Area matching Drosophila gene for Aspartate
ligase, accession number AF113612.

<220>

<221> misc_feature

<222> (35)..(86)

<223> Area matching Drosophila gene for Aspartate
ligase, accession number AF113612.

<400> 109

```
gactgcaccg cgctggtggc atgtgcaata gtacacgacg ctcgtgaaat caattcgttt 60
gtgtattaaa agggcaagat ctagctggta agtcgagtgc actcgaatgc accattgaaa 120
taaccaatag gggaagagac aggaagtga tagaatcgg aaatgatcag ataaaagacc 180
gcaaagttta ggttatgtgc gagccgctag acaaggagtg tttctctgtc cccggaaata 240
tttgtggaca tatggctatt ggaggaggag actgggtgac tgaactgcag tccggaagac 300
aatgtcactt attcgcaa at ggggcacttc atcagccaag tgctatttat aaaaccatga 360
cgcaacgcac acaatactcc tccttttttcg cctgttgctc gcttatcgaa actgtgtggt 420
ctacgttctg gttttgtgac cctcttgtaa aatatacaac ccttccttct tacagccgtt 480
tttgtgcatt ccaagatggt cgaggacaaa gagcaagtgg ccacgggaag caggtcttca 540
agaagggacc caaaagctgg ccaaggccgt taagtgagaa tctttgtttg gggacctggc 600
gttttggtt tctt 614
```

<210> 110

<211> 636

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (368)..(636)

<223> Area matching Drosophila EST AA390587

<400> 110

```
caagagacca ttcaacttttt tcgttttgaa gcaacaaatt tgaaaagaga aaactttatg 60
tttttcccgcc gggcttggtt gttttttttt tctcgctctc cgtcgaattg actctacatt 120
ttgatgtgat cttattatta ggtgaatcag ctgtcttcaa aagaacagtt ttaattttaa 180
aaaaaatccc tcaattccaa ttcaaatttc atttagaaca caacgaagat atttctcttc 240
ttgtacgaac aaaatgctct cttaactcaa gttggaacgg ccgttccggc aacatttaag 300
ttggcaacat tgttgcattg tgcattgatt tgagcacaag agtgtcattt acgattagca 360
actcgcggcg aacggacgtg tgtaaaaaat agccggggag aaaaaacgaa gtgcgattgc 420
cgaagaaaaa cagagagatt tcaaataata aagaaatgca aatgaaacag aagaaaataa 480
aaataaagca aagtgccgtg agttccatct cctcagtggg gtgaaatttc cagcagagtc 540
taacggcgat ttgcgaatgc cgctcaagaa gtgcgaaacc aaaacggggc ccggttaa 600
attctcaagc gaaaatcatg gcttttttga taccgc 636
```

<210> 111

<211> 342

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (55)..(110)

<223> Area matching Drosophila EST AA979454 (inverted).

This EST has sequence similarity to human REC1L ,

Acc. No. X57303

<400> 111

```
aactcaccca tagtactcgg cgaactcctc cattgctgac atgcgaatcg attagattaa 60
attcaattaa taatgtaccg ctcatcaatt tgccggccgt ttccgtgctt cacataacca 120
```

ttctgccgca aaccatgtgt tttgggcata aaatcacttt tccacgcaac acaggcacat 180
tgccagtga gctgccgctc tctgcattct gtcatttgcc atgaccgcag gcaaaagggg 240
gaagcacctc gttgaaccat tttaaataag tgttgctgca agcccaactt gaaacctcta 300
tttagacacc taaaaatata ttggatttta aaactttgaa aa 342

<210> 112

<211> 575

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (31)..(460)

<223> Area matching *Drosophila* EST AA941359

<400> 112

caacgaacgt ttccaccac aatgaaaaca aaacgtgcaa ccggccaacg aaatgccgcc 60
aaagtcaagc agcaagaaaa accaggttac ttggtaccac tgcgagtcct gcggcgcca 120
cattccctcg aaagcgagag ataaccacga gggcttatgc tccgccatca gccaggatga 180
tgttggggccc gattccgagg cggagtacgt tcgcagtgga gcaatctata cgagaagtct 240
tcaacagcgt aatttcgagg tggagtctct gaaggatctg cccaccaagt atgccaatat 300
gctagtcttc gtctccgagg gtgcgatgca attggcacag ctacacattg gacaacatgg 360
tggtgctgga agctccatcg acggcggagc agccgctggt tagggattgt atggcccaca 420
tcagagcaat tcctcaccac agtatttgtc agcgaagggg gtattgtgtt tcacactata 480
aaaaccgctc tcaacaataa atgatcatac ttttaaacag atttcaaact tcattgcacg 540
caacttcagg aagctactca agactctgct tgcac 575

<210> 113

<211> 299

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (65) .. (299)

<223> Area matching *Drosophila* ESTs AA201303 and
AA541066.

<400> 113

ggacagtatg tgcgagaacg aaaatttcag cacatcgcta gcgcagcagc cttgttggtg 60
ttcgtctgtc tctgtcctac aagcgtttct ttttgtttgc tgagaattaa acaaaagcga 120
tttgttcgcg ggcaatgcga atgcatttgc aaagcagggc acaaagcatc ggctgtttcg 180
actgtgattg cacaaagcca tgtagtagag gtcgagctgg cgattcgcaa ttatccacag 240
gcgacgcaac acggtgctaa aaattgcgta gccaattaat ctcgaaatcc ttcgaattc 299

<210> 114

<211> 581

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (538) .. (581)

<223> Area matching *Drosophila* EST AA698119 (inverted)

<400> 114

atccaatggc tttctgccgc gcttttttac agctgatgcg agcttttgcg taaagctttt 60
ggccaactat cgttcaatcg gaatccgaat gtgtgttaaa tcaatactgc ggcggccaga 120
taatgatata gatatgaaac ttgggatccg gaatactgga cacaaaacag aacgtaatcc 180
gcacagctgc gtgctggacg cactatttga gtgactcaaa accgattcgt ttttcgtttt 240
gattcgatcc aatccaatcc aaccggattc gagtagaatc gtgaccatgt ttacctttgc 300

gcctcagcaa cagactgaat gcgaaacaca gaaaagccga agtcgcccga tttccgacca 360
gcgagaattg gaatgagtat gccaatggca atgcgaacgg aacgatttta gcggcgggcg 420
taatggcatg tgaaaatgat tacatcagag tttgagtcac ttttccgca cactcgccgt 480
cgttttgccg ctacccgcac ccgcactcgg gcaaggcaaa tcggttattg agtcaccta 540
gtgctctgga tgctatctga tccgattccg aatccgaatt c 581

<210> 115

<211> 632

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (111)..(549)

<223> Area matching *Drosophila* EST AA696174

<400> 115

gccacgtctc ttctccgcca cctcggctag agttgccaac gatttggatt aatcgattca 60
tcattgtcgc acaatgctca ctcgataaag ttcactatcc aggtgatttg aactaagtta 120
aatgttaata tgttttaccc aaaaacacca tttttggtga acccgttgct ggaagccgat 180
atccttaaag tgaatgtatg tactttcaat gtgcacaaat acgtatttac aacaaaaact 240
ggcttgcaaa ttttattaac tgttaattcc tggttttgtc aagtctgctg cacttgctcc 300
gctgttggaa tggtgtgcc ttactcccaa agtcaccact tacaggggtga acactcttag 360
gtgttccgtt gacgactttc ggaaaaagtt agaagaaaaa ctcgccattc gctacggtgt 420
aaaatctcca aggatttact gcttgccaaa cctacccgag atgttgtgca ttgatccgct 480
ggactcacag ctacacaaag ctgtggccga ctccgactca aggaggtaag tggttgacac 540
taactgcgga gctgcactac tgcgaggcgc ccacatatac gcccccggtg tttactatgg 600
agtcaaacct gaccgggagg aactcgcaat gt 632

<210> 116

<211> 243

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (107)..(243)

<223> Area matching *Drosophila* ESTs AI064230 and
AA263288.

<400> 116

ggttgccgta cctgcgacag ctaacggtga agccgatagt ctgcattatt gtcccaacag 60
aagtacgggc actctacaag taggcaacga attttgtttg tcatcggcat ttcgcattca 120
acgtttccaa ttgtttttta aggagcttta agaatggctt tagctgaaat ctgcaagata 180
tcgaatgctc cgtacatgcg gcccaatgcc tggtcacggg cggatgtgga ggaagagcaa 240
aaa 243

<210> 117

<211> 445

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(212)

<223> Area matching *Drosophila* EST AI106957. This EST
forms a 1756bp contig with ESTs AA391125, AA567307
and AA735971.

<220>

<221> intron

<222> (213)..(275)

<223> Probable intron in gene represented by EST

AI106957

<220>

<221> misc_feature

<222> (276)..(382)

<223> Area matching Drosophila EST AI106957

<400> 117

```
gtttgtagtt tcagttcact ttctcggttg tttttagtgc ctcttgcggt ctccttggtt 60
ccttacttat gcatttttctg ttctcctttg ttccattaa acccccaccg aagtaagcga 120
atccagcgcg atgttggtga aatcgctgat tgcgttggtgc gtcattgggg ctgccgtggc 180
ggaacaaacg cccgtctttt tgtggggagc caacaggtgg gtgagcgcct gcaccagttg 240
aatgtgagtg taacgagtg cttcctcctt ttttcacagt gtggcgaaac cctccctgaa 300
gacggtgtcc caagtggagt ttgccgagca gttggcttca ttgctggaag atcacatggt 360
cgtggccttc gaggaataat gcgtaagtgc ttgagcacc accctagatag ctagggcttg 420
tgacacatgt gtttggtccc aactc 445
```

<210> 118

<211> 107

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1)..(107)

<223> Area matching Drosophila EST AI820473 and

AA820473(inverted). Sequence similarity putative
cytochrome bc-1 complex core protein [Haematobia

irritans irritans].

<400> 118

ccctagtttt tcaatgcgct ccaaaatggt cacaccgagt accagctgtg acttatggta 60
agtcacggga ttttcgaaat atcgtgatct tgaataattt gactaag 107

<210> 119

<211> 546

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (19) .. (102)

<223> Area matching Drosophila EST AA978449 and
AA940834.

<220>

<221> unsure

<222> (103) .. (114)

<223> Gap of Unknown length.

<220>

<221> misc_feature

<222> (115) .. (485)

<223> Area matching Drosophila EST AA978449

<400> 119

tgctggagaa agcagtagaa tgataagttt aggccgtatt tgcacaatta ctgagtaact 60
agtgacagcc gaacaagcgc catgtattca taagcacctg ccnnnattcg aatttaaagc 120
ggccccggag cagaagcgac gcattttcttc gccgagcgtc cgcagagccg tcggatcgga 180

87/586

tccgatcggg ttgattggat tgggtgactaa aacagttgga caacaacagc ggcttgatta 240
gttggcagta aacagagcta ccgaacgcac cggtcattca ctccgcaccg ttttgaccag 300
aagcagttcc agtattggta gccataaagc cacagcaatg gggctctccg ttccagcagc 360
tgaagaagct ctggctgctc taccttttct gctcttttct cgttcttcat ggctcgccatc 420
agcatcaacc tgggtaccgtg gccagcattc aaggcggggg acgcggagat gccgtgaagt 480
agttggcccc gtaattaaca atgggccccat taggaccccc ggttggaatg cacaactttc 540
ctggggg 546

<210> 120

<211> 546

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (182)..(362)

<223> Area matching *Drosophila* EST AA802905

<400> 120

aaccccgagg agaaaaaaca tttttaccat tatgttggtg tcctcttctt tcattttatg 60
aatggctgt gtgaacaaga gatggatggc gcagtagtgt gaccaaatac gtgggtaaaa 120
agacgcagca aaatactgaa acactcatga aacggccagt cggcgaaaaa ttttcaaata 180
gcggggctgt acagcggacg attttcaata ggaacggttc agctttggag cggagcgcgg 240
agtttcgcat tttttgtgtt tgtagcggaa aatcggatga aaaactccaa atgtttacca 300
aatgagcggc gacaaatacg cgaccaattg acgagatcgt gtgtgttttt ctcaattaaa 360
cggtgagtgt gcgatagaga tggagatgta aagtatgcag tcaaattaaa gtgcggcaaa 420
aaaatcaaag gtgaaaaagt cattaataaaa gtaagcaaaa tagaattgct ctgtggaata 480
taaaaatggt acatataccc atacatccat aaataaatat atatatatat atgaatatct 540
gcaagg 546

<210> 121

<211> 572

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (235)..(279)

<223> Area matching *Drosophila* ESTs AI259166 and
AI296787. Sequence similarity to Dihydropyruvate
acetyltransferase component of pyruvate
dehydrogenase (human).

<220>

<221> intron

<222> (280)..(375)

<223> Probable intron in gene represented by EST
AI259166

<220>

<221> misc_feature

<222> (376)..(452)

<223> Area matching *Drosophila* EST AI259166

<400> 121

gacagtcccg tgtccaacta tttagcatat atgtcgtatt ccccaaaaac actctcacac 60
atacccatgc gatttgcggtg tgggtgtgctg gctccactgc tnnccaagg tcgaatacac 120
gctctcctat atcgcatgat gcgtgatagt gtttcggctg gctgataagc tggaaaattc 180
cgtctaata ttaatgggtc actctttttg ggttcattg ttacatctg acgagtgggc 240
gattgaacgc cttaatgtgt agatagtaca ggagtgtggg tacgtaaaca acaacaaact 300
aacagctgat cgagcgcca taaattaacc catccaaaat gctttcatta acatgggtcat 360

89/586

tttgtaatta taacagggtca tacaaaaatt acaccgttga gaatcagaag taaaaatagt 420
ttccaaggat actattttact catattgcaa gtaatacacc tatactatatt atgcaatatt 480
accaaattaa taattttatga tgaattatta agtttttttaa taagtggata ccacccaatg 540
caaccactt taataaacta gtttttggtg aa 572

<210> 122

<211> 492

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(238)

<223> Area matching *Drosophila* EST AA951193 (inverted)

<400> 122

ccccgaaacg gcaatggtct gcaccgaatt tattcacttt actcgccgcg cgattttactg 60
gctttttcttc gcatttggac ttgccaccgt tgttgtcagc tactttttca cacatatgtg 120
aacgacgcga cggggttcgt tgcgagttct cggcactagc actgaatact gtatatatgt 180
gggaattttc ccacatattt attacgctcg ccaacagagt gcactgcgtg agtggttggt 240
tgtactcatg cctcagaatt gtcaaattgg agagtcttgg agctgctaaa acatcgctgg 300
ctgccacgat agtatcggtc gctaggtgcc agccggtgcc agcgatggac acacaactaa 360
atatcgaaac tcctttttat taaccctata atgcctgaaa ccaaattgtgt acatgtcaaa 420
agctaaatat gttggcccat cttagacaaa aaagaaacca taaataaccc tctggatagg 480
taacgtgaat tc 492

<210> 123

<211> 605

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (326)..(482)

<223> Area matching Drosophila ESTs AA696743 and
AA803977.

<400> 123

```
ttcccaccta cgaagattgt ttacccttca tcttcggttt catctattac gcttcatttc 60
tcttttttatt tatttttttaa ttttgattga aaacctttta ctgcatttgg aaacataaaa 120
aaaacttcag aagtatttta aatgaaataa tagaatatat ttataaacat aattttaatc 180
aagcctttac aataaataac aaaaacacct atttagcctt ttaaggctt cgcacgagga 240
cccagtggag acaagctata actgatttga gatagaacgg ccacacatcc accggtggcc 300
agctggattg ttactgttgc ttttggtttt gttacaaatt ttgatttttg tcttgtttaa 360
caaaaaatga taaaatcttg aacagtaaag ataatccaca caatttacta tgagcaccgc 420
cactgggaac agcagacgga agacggaggc gttgcagtca atatacgagg gcgacacgac 480
ttcaaggaat agattagcgt ccattttcag taccaagtaa gccacattgg ataaaaaaag 540
ccacaattga taatttgtat atataatgaa attttagtat ggcgaaaggt actaccagcg 600
tcttg 605
```

<210> 124

<211> 539

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (11)..(512)

<223> Area matching Drosophila ESTs AA990758 and
AA246427 (975bp contig)

91/586

<400> 124

gtcgcggctg tttgacgttt gtcgctttcc tccgttgcca atataatata ttacgtagct 60
catttttata caaacggaat tacgagcgca acgacgacag caacactagt agcactaatc 120
gtaagcgcag gggccaaaaa ttaaattgcg tttgcggccg caaagatttg atgacgtcgc 180
atacgccgtc ttctagggcg taaaaagcaa agcaaagcaa acaaacgcga aagcgaaacg 240
tgtaaacggc gtagaagcga taaacgcgac tcaaatacgc agcagataaa atacaatacg 300
cgagaagagg aaaagtcacg ggaaatattg ttcattttcc ggcgtctttc tgcgagcgta 360
aacgtgtggt gcgtgggctt gtgctttgcc agtgtcgtgt gtgttaatgc ctgtgtggtg 420
tgtgtgatta agaagatata aaggatataa cggtaaatac acgccgaaaa atgtgcagct 480
gacgccaaca catggtaaac gtacgcacag nctacaccga ctattgggaa cttcaaaaa 539

<210> 125

<211> 563

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(406)

<223> Area matching *Drosophila* EST AA697797

<400> 125

agctgcgctc tgtgcgtgcg tgtgtatgtg tgtgtgcgag tgagtgtgtg tgtgctggcg 60
cgtctgtgtg agtgcggtgc tttgtgtgca gaataatttt tgcaaacatt atgtaaatgc 120
gcaaaattaa gttcaatcga cgcccgtttt gaggtagaaa ccagatcgcc ttgctttaag 180
tgccacggag ctacagtttc ttttcgtacc caatttttca aagatatact ccctcagtag 240
gcaggcacgc acacaaacat acacaggatc tcaaacgata ccccgatat acctttaccg 300
ttaggaaaat tcaaaatggc cacgacagcg gccgcaatgg ccgcaacgag ttagtattgt 360
ctggatcgcg gaaacaatac aacctgcacc atcaacttgc acggtgagca gaatgtcttg 420
aaacaatgat aaacaacaaa tgaatagctg gcgaacaatt aatcataatt aagaagacac 480

92/586

caccagcact ttgccaaaat tttgttggcg ttatttttag cggatgattg gcgcttagac 540
tttccgaacc gaaccggttc gcc 563

<210> 126

<211> 522

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1)..(29)

<223> Area matching Drosophila EST AA802206. This EST
forms a 1341bp contig with ESTs AA@02662, AA801949
and AA942041

<400> 126

cttccaacaa accacgtttg aaaattgacg tttctctggt gacgtaaaaa aacatcgccg 60
atgcgatata tcgatacatt tcgtatagag ttgcttnnnt agctaaaaat ataataaaag 120
ttatacatct gagcttatac acgccaccga caatatacat tagatctaca tgcaagtcca 180
tcactctttt cgcttcaatt gttatatatt attttaataa acatcgagta ccaccagat 240
agttcggttaa aattgtaagc tgtgatcact gcgaataagg tattaataaac taaaaataga 300
taaattttat attattttct ttatttatgt ttcttgtaga taaaggaatc gaaggataaa 360
ctataattaa cacaggctcc tgccccggct taggattttc taaatgtaac tcttctgcaa 420
ggtccttaag gaatgtttta tataaaaaata taaaagaatc tttagtgatg cgactaagac 480
tatgtaataa acaaaaaaaaa ccaggatgga atgctatagc cg 522

<210> 127

<211> 592

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (344) .. (592)

<223> Area matching Drosophila EST AA978904

<400> 127

gttctgagcg cagcaatagc agcaagaaga ctaccaacaa agagcagagc gacaaatcag 60
cggagagcag gatggccacc agcgggtattg tcgagtcatn nnctggtgcc caaggcggag 120
acggggagtcc tgaactttct gcagaagtac ccggagtacg atggacgcga cgtcaccata 180
gccatcttca tccggcgctcg atccccgggc aacgggactg gaggtgagtt ggcacttttt 240
cgcactctct ataccggtta caaagaactt gtacagttat tcttccaata ttacaatat 300
ttcgtcttac ctattctatt acgatttaat ccttctactg tgtcacgact gcttcttact 360
cccgtttctc attataaccg atccaatttc aatctgctcc tacgcaacag acgctgtgcg 420
atggaaagga ccgttaaagt aatagagcgg tacgactggt ccggatgcgg cggacgtgga 480
catgaagaag aaggtgacgc cggacgagaa cggcaacatt aagggcctgt cggaaactcg 540
ctcagctgaa tccggactga tggctctgac acagatccgg aaaagcggtg cg 592

<210> 128

<211> 551

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (101) .. (223)

<223> Area matching Drosophila EST AA202366

<220>

<221> intron

<222> (224) .. (291)

<223> Probable intron in gene represented by EST

AA202366

<220>

<221> misc_feature

<222> (292)..(551)

<223> Area matching Drosophila EST AA202366

<400> 128

```
ccctggagtt ggaatttta acgtttttgt tcggttgctg aacgttttgc gcttgaaaat 60
gccagttcgc agcgccctggg cgcgagaagg tatgatgnnn atgtacctct tcaccaaggc 120
gaatctcata cgcttcctag ccggcgcgat atgcttggtg ctggtgctta actttgtggg 180
cttcgctcga cggaggtagc gccacctccc tcagcaagct caggtaacta aatctatcat 240
attgccttgg cagagggttat cttatcaatt atttttggga acggatatta gcattcggcg 300
cgtgcacaag tatgctcata tctacgggaa cgctagcagc gatggagccg gaggcagtga 360
agcatccagg ctgccgcttc cccgctcgcc ttatcaaaaag acagagagcg ggaccaggag 420
ctcaatggcg gaccaactc taccataaga actgtgattg ccacggcaaa ctttactttc 480
attccacaag acttaacgcg ctttctgctg ggcacaaaaga aatttttgcc cccgcgacag 540
aatccacat t                                     551
```

<210> 129

<211> 492

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (103)..(468)

<223> Area matching Drosophila EST AA950164

<400> 129

gaatattgca aacaacacca acaacaacaa gaacaacaac aaaaccaaaa gcgaaacagc 60
aaaaaataaa taaatacgag gaaccagttt accttgaggn nnacactcac actcgactc 120
gcattcacac aaatgaaaca gcccgatctt actcttactg cgagtacgga cacatagtgc 180
acatatagtg catatagtgc acagcacaga gcacagagta gacatagtga ccaccacata 240
atttcgtgat aaagccacag agaatcggag cgctccgcct tatcggcaac ccactgccac 300
tggtccggct actatgctcc agcggggatc gggacatcat cgctgggata gagacacagt 360
ggacaccaga actgggatgg cagttgcagc ggccccaac gcattgaaag atgatagcta 420
agcccaacca ggccaccacc gaaccacat taagcttgcg ccccggaac agtgccaaac 480
gggtttcagc aa 492

<210> 130

<211> 602

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (23)..(98)

<223> Area matching *Drosophila* EST AA952159

<220>

<221> unsure

<222> (99)..(101)

<223> Gap of unknown length

<220>

<221> misc_feature

<222> (102)..(602)

<223> Area matching *Drosophila* EST AA952159

96/586

<400> 130

cagcggccct ataaaaattg ctttttgtgg ggctgtcagc tcagtcagcg gctcattcat 60
cactttccga cgcgctctag agtagctagt agacctttnn ntattacgcg tccccccgaa 120
attgccccgc cgcccgaaac gcaatagcat tccgcaaaaa caatacgata agcagcaaca 180
agtgttcaag attcccttga aacatacaca gaatctaaaa ctccattgaa attggttctc 240
agttgttttg tttaccacgc aatcagtgcc caagaacgtg gcacatttcc aactgtgggc 300
gggtaaaciaa ttgtgcgcga acaattaaga aaacttggtc gccctgtctg tgtacacgcg 360
aataaatctc gggagtacaa ttccatacca gcccggtgac gggcacggaa aagcagctct 420
aactgtgcaa gatgattcca ggctatggac ccgtcacgca ggctctgctg ggcaccctgc 480
ttacctgggg actgaccgcc gctggcgccg cctagtgate ttcgtcgggg taaccagcgg 540
aggtctctgg acgcgcctg ggattcgag ttggcgtaat gatagcagcc tcttttggca 600
tt 602

<210> 131

<211> 558

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (102)..(512)

<223> Area matching *Drosophila* EST AA392519. This EST

forms 758bp contig with EST AA695318 and AA441243

<400> 131

gactaacggc tctccgtctc cgccagtcgg atcggctata aaagcgggtg gatctcagcg 60
agcgccgttc atttgagttt cgcggttcga ggtgtttnnn cggctcttcg gctctggaga 120
aaactactcg catcgaattg aattgaatct ggggaaaatc agtccgagtc ccagctacac 180
agttagtttc acttcccagt ccaactataa aagtgcgctg cagtcccagt caaacaactg 240
cattcagata caaactattg ccaattgcat tttcatgagc taactgtctc gcatcgctg 300
tgaaaagtta caaacaacac aaaaacaatt gccaacgggt aatgtttaat gtccaggcaa 360

97/586

ttataaaaag caattcgatt gtctagctta cgcaaggcca actacaatta ccaataaata 420
cgagcaataa agcagcacag aaatcccaat ttggatttat taatagccgc tggataaaaa 480
aatcataaaa caccaacggt gcttgtaa atccaaccaat ggtaagtatt ttttcggccc 540
caaaggtaac ttcaaaaa 558

<210> 132

<211> 541

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (304)..(541)

<223> Area matching *Drosophila* ESTs AI515517 and

AI404462. ESTs have sequence similarity to Ras
related proteins

<400> 132

ggtggtacta agcgcgtctg ggaaatgcaa ttagtgatgg gcgatagttt tgctatcggg 60
tggcatcttc caagcggtaa tcgggggtcgt gatttttcta gtagtcatat tcctgattgg 120
aatccttget aaccaatcaa actaacacat aaatatattt tttacgaata tatttacttg 180
tgaaacaaag ttatttcctt gcaaaattct actctgcaag accagctatc gctgccagca 240
gcaactatcg cacctcgtgt cagccctggg aaacagctgt tcgcgcataa cataacacaa 300
taacaacaag ccttcaaatt tattaaatct tttatcttta ctgctgactg cgcgctttta 360
atcgacgcgc ccgctttgaa aacccccacc gactccgata aattcagttg tgcccaagaa 420
atcagacgca gcaggccgcc aaagggccaa ttacgcgctt cccaaccact ggctctacaa 480
gcaacaacaa caacagcagc acaccactgg accacacaca tcatctcatc cattttacaa 540
a 541

<210> 133

98/586

<211> 494

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (191)..(387)

<223> Area matching *Drosophila* EST AA698481

<400> 133

gtgcatacat acaaatgcag atatgcatgg caacaagagt tacatgactt tccggtttta 60
caggtttgct gcaaagcttt cgctctctca ttcggcgctc tctctctctc tcacacactc 120
tggcacctgc ctaattcgat tagccgcacc gctcgaacgc tcagtcttca aagagatctc 180
gaccgagcaa caagtgaacg gaagaatccg agcagtgaag aatcagaaag accgaggaaa 240
cactcgagaa ctctttaata acattgtgaa ccaaaaaacc agaaacagcc actgaaaata 300
cacggaaagc agagtgattc gcatagtttt gctagtgttt tcaagggcac ccatcatacc 360
agctgtgctg caaatTTTgt gccaggtagt gaatttaaT gaaaggccaa gaaaccacga 420
attatattga aaatttccat tatctagaga tcggtcgaga acgtacgcct gcaagacgta 480
ttctggcaga tttt 494

<210> 134

<211> 606

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (451)..(606)

<223> Area matching *Drosophila* EST AA803082. Forms

2166bp EST contig with AA941565, AA820668,
AA978815 and AA697381

<400> 134

gctcagtggg aaaaaggata aaaacgaaga caaagtaa at cggagaaa ag tagcaacgaa 60
aaaagaacca gagcgccact aaaccgggtc gcttttcttc tcttttcttg ctgctccaac 120
tctcttcgct gattctctcg gtctccagtt ctgctctct ctctctctct ctctctatcg 180
ttgcgggttaa ttaaaactcc gagaggcgtg cgacagttgt aagttgtgta ttaaaaagtg 240
gtaacaacaa caagttagct agcgtggcca attagcattc attttccgca aagagcagcc 300
gcggcacaca gcttttctga ttagaaattc acagtgggca ctggaagtgt gtctgttgta 360
aacggatcct cttggatttt atacataatt cattagaccc ctttgggtgct gcgttagctg 420
tcccattctt cgatttccgg tacttacaat ttttgccaac tgcgcgggtg gtctctttct 480
atctctctta aatagggtgaa aactaactgt ggtaactgtg caattaacta gtgagagtaa 540
tagtttaatt ggttggcact tcgctcttt tatttgtgta tgcaggctgg aattaaatcc 600
cacgag 606

<210> 135

<211> 570

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(570)

<223> Area matching *Drosophila* EST AI405762. This EST
has sequence similarity to hypothetical proteins
from *Arabidopsis* and *C. elegans*.

<400> 135

gctgggcgtt tcacaatttt tttgggaaac acaacaaagc ttcacaaagg acacgatgct 60
cgttctggta ctggcgacc tgcacatccc gcaccggtgc agcagcctgc cggctaaatt 120
taagaagctg ctggtgccgg gccgcataca tcacatctg gccaccggaa acatctgcac 180

100/586

caaggagtcc tacgactacc tgaagtcctt ggccaatgat gtgcacatag tgcgcggcga 240
cttcgacgag aacctgacgt atccggagca gaagggtggc acggtaggcc agttccggat 300
cgggtctgtgc cacggccacc aggtgggttc ccgcgagac ccggaggcgc tggccctcat 360
ccagcggcaa ctgggacgtg gacatcctga tcacggggca cacgtacaag ttcgaggcct 420
acgagcacgg caacaaattc tacatcaatc ccgggatcgg ccacgggtgc cttcaacca 480
tggacaccaa tgtgtgcct tcgttcgtgc tgatggacat tcagacacca cgggtggcac 540
gttacgtgta ccaacttgat cggcgacgag 570

<210> 136

<211> 236

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(38)

<223> Area matching *Drosophila* EST AA391495 (inverted).

This EST forms a 1135bp contig with ESTs AA439145
and AA949325.

<400> 136

agccgaaaga tgacttattg acgagcggat gaccatattt cggatttggg aaaaatccag 60
ctgtgctgca aacgaaaaat accagctgtg aacgtttttg gtattaatat ttaccaaata 120
aataaattta tatttatctc gaaaacaatg aaaattcctt aataacatta cattacttct 180
ttattaggag tgcttaagta ttctttttaa taatgaatta taattaatat tataat 236

<210> 137

<211> 526

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (353)..(476)

<223> Area matching Drosophila EST AA942305

<400> 137

gctcaaaactc ggcgctcaca ttacgcacag tggtcgagaa aatgatagat gctgcttaga 60
tggcaactaa atattttaat gggaaaaatt atgtatgcta gtgttttggt ttaaatttct 120
caaccaataa agtaatataa agaatgtaaa ttaataaaaa cattgtattg aacgaagtgg 180
ttcaataatc gtatttgaat acagaataat ttgtacgaaa atatttaagg tgtgaactac 240
tgtgcggaat caacttggtt gttccactgt gactctcttc gacgattggg tgttgccaga 300
ctgaagtcgc tacgactatc gcatcaacta acgtagagca ctgcagccct ggttgactag 360
tgccgccttg gtccgattgc cagaaaaaaaa caagacaagt gaaaaagcaa gataaatcaa 420
attaaaaata ttgtaaaaaa ttggagttaa cacgcgctga gcacggtgac tgaaaatgtg 480
atgaaaccat catagagaga gacagcgcgga ttggtggccc caagct 526

<210> 138

<211> 391

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_difference

<222> (72)..(391)

<223> Area matching Drosophila ESTs AA951839 and

AA979603

<400> 138

ggctagtgtgta tttattttaaa tattagcttt gtgacgttcg ctcaccaaact cagtattttt 60
cgtaccatcg gcgttaaaac acatgttcag cgatttagtg cgggagtgtg aactaatctg 120

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agtaacaaca acagcatcgt cggcaaagca acaacaacgg cagcagaaaa ttttaacacg 180
ttgacgcttt ttctagtgtt tatagcgagc ggaaaagctt actaagcgcg taacaagcga 240
gaccccgaaa tcttttttca tctcggtctt ttcgcctttg cgtctttgag tgtgcgtgcc 300
aaaattcaaa tacgtcatcg acgcgcgcag ccttaaateg aaaaggaatg aaataattga 360
tatacacaaa tgccagcgaa agattgaatt c 391

<210> 139

<211> 458

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(112)

<223> Area matching *Drosophila* ESTs AI386817 and
AI404737

<400> 139

cgtcagtgtg agcgcagctg ataacggggc gcggagtggc gacctaaaga cgcattggacc 60
gcgcaggcag atggaaacag ttcgcaccgg ttcgctcgag tgtgcagtag atgatccagc 120
ggcaggaatg gcggccacga tccagaacac cctgaagggtg gcgctgcgaa agcgcattgaa 180
ggatgcactg aagggcatcg acgcggaggc catcgcccg cagtcgcagg ccgtcacggc 240
caaggtaaca ttggtttggc tgggcccacaa gggttatcaag ttaatcccca atcctcctaa 300
tcggctcgat cgcacagggtg ctgcaaagcg agaccttccg gcaggcgcag cgggtaagca 360
tttacctgag cacagcctcg gactggacac cagcgcttg tgtcggagat gttccgctgg 420
agaagatggt ctttgtgccc actacgaggc acaggatg 458

<210> 140

<211> 527

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (435)..(475)

<223> Area matching Drosophila EST AA438658

<400> 140

```
gccacaatcg tgcgaaaatc acatttacat acatatatgg gttatgagta gaaaacgaag 60
agcaactcgt cgccgtatta gtcacgaaac atcgcagtcg gggaaattcg ggtagaatg 120
tgctcatcca tagttgtggg aaaaataact aaatataagt ggtatctgtc tataaaaaag 180
accaaagttt tcacatagtt gtgtggcttt tgagattaaa catatatcat atcacatcaa 240
ttgaactcgt ttttatccac tgtacagcca agtatcaaca actcatcatg cgtaacattg 300
ggcaacgcgc gatgagcaag gccaggcaat gagtagccgg ggcaaataaa atttccaaac 360
cttggacatt gtggagtttc aactccgcca acattgtttg tgtattttat ttaatatacc 420
tatctatcta tcccagcacc tcgggcagac atattccttt gtgcacacca tggcgattcg 480
aatggcgctc ggctttgtcg acaggatccg cggacgacac ggccatg 527
```

<210> 141

<211> 483

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (31)..(212)

<223> Area matching Drosophila ESTs AI106794 and

AI107315

<400> 141

```
ctccagagac tggcgacact cttggttccg ccttggctga gcacagaggt gggtacagtg 60
```

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gctactggct ggcagtgacg agcgcttcct ttgtgttgct ggcgtaggcg tgacgccatg 120
ttgtgaaaag tgtctgacag aaagtggaaa attcgcacgg aaaactgcac tcgaaagtcg 180
tggaataaaa gagcattgtt aaaacaatcc aagtgagttg tgaaaagtgc aaactttttg 240
gccagtgatt gtgtgtgtgg cgaaggaatt acgcaaagt gtacacaggat tttccgtttc 300
cattgatttc gctggggggcg tgtgtgtata tattatatac atatatatat ttttaatgcg 360
tgaggaggacg aagcggagcc aaaatatttg cgtacaattc atttgcaact cccgggattc 420
actaattgga catggactga tgaattgggt gtgggcctgt tgaacaaagt acctcgggca 480
ttt 483

<210> 142

<211> 430

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(228)

<223> Area matching *Drosophila* EST AI403747.

<400> 142

caataaacta attgttttaa atgtgacaac agtgaaccaa atgcttgctg agtaataaac 60
caaaggatgt ttgttttttc taaaacgtgc caattgaatc ggctccacgc aaatgagagt 120
gtgggagtggt ggtctgaaaa caatggagct gccgtaaaga attgattaaa caaaatagtc 180
gagaagagag cgcaaaatgc acaaaatggt taaattattc ctcaggtaat ttcagtccca 240
acaaaaacaa catgtgccag attgctttcg tgctcttatt gctgttggtg tagttctaga 300
ctctctcttt gcgctttaat attatgaatg acgtaagcgc gcctctttgg tagcaataca 360
aaagcaataa caacaatttg gttttgttgc ttttgtaaac aaggaaaata acagaatgggt 420
tttgtcctgt 430

<210> 143

<211> 272

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(272)

<223> Area matching *Drosophila* ESTs AA802791 and
AA390699

<400> 143

gaacagaact agcaaagacc cacttgatcat agatgcgtac gagatcggtta accaaacaac 60
aatcacgttc gcaatcgacc agaaagacac tgaaaatcga accgaaatca ccccgagctc 120
ggcgagcggg tagagttgtg taacacggac ggacggggccc aaaaaaaaaa gaaacgtgaa 180
ctagaactct gtgtctcttc cgttggtttt gttgagtttt tggcgagcag gtgaaacaaa 240
agcatggcgc ttgaaacgga ggcgaagaat tc 272

<210> 144

<211> 489

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(190)

<223> Area matching *Drosophila* ESTs AA949990 and
AA246423

<400> 144

gctccgacgg attggtgcgt cgctcgggtga aaccccgca aaacggtggg gcggaggggtg 60
ggttgaatgc caacacgccg gacgacaacc aggatgcact ggacaacctt aaggaccagg 120

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aggacaatat cgacgatggc gactccaagg aaacacgact aacgctcatg gaggaggttc 180
tgctgctggg actcaaggac aaggaggtgg gtgtgctcct tatctcatat ctgcttgga 240
tgcactaatt aattggtttc tttcgcaaca taagtgttc ttcttcacct gtttaaccga 300
cgtctctctc tctctgtcgc tctcacgatt tctctctttc gcaacctctt gcttggtcca 360
agtgaaccg cagtccatct tccagcaggg gccgtagtga aaattggata caggggggta 420
acttatcact ttcagttatg gggcaaccaa tggttatctg tctacagata acatttatga 480
actttcgat 489

<210> 145

<211> 463

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1) .. (202)

<223> Area matching *Drosophila* ESTs AA201161 and

AA438658

<400> 145

gtcgaaatcg aaccaatgac gtcgcgaatc tgaggcgaca aagagcagcg ggaggaaagt 60
ggtcgcccga acgaccgtat tgtgtcagcg taatcagtat tagaagcatt agcagtcagg 120
attggacaca ccagtcaaac gaacaccccc cactgaccga cacagaaaca tgtgctagac 180
ctcctcgaaa tgggatcgcg tatcaagtga gtatgcccat gccgcccagt gccagttcgc 240
agcagcagtg ggcgttgcg tccactggtc gctatcgcg cgctctcact cccgcgactc 300
atcgcccatt cctcccgtc ctccccccag aaatggacgt gaagaagctc ttcgagttct 360
ggtgagaggt cagccgacg ccgggattag agaggggcac gagttccagg agcggcggcc 420
agctgttccg ccggcggtga tcgtggagag cttcccagg gat 463

<210> 146

<211> 506

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (202)..(472)

<223> Area matching *Drosophila* EST AA978927. This EST
has sequence similarity to human PCF11p homologue

<400> 146

```
gtgcagccta agatttcagt gcatcacggt ttattacaaa taaaatgggc agagatgaag 60
atatcgctaa caaacatcgc aaccttaata cattattcat ccaaaatata cgcacaaaat 120
cccattaata gtgcaaactt ttccacacaa attacctttg cttttcatgt catttaatta 180
ctttgttata ttttcccttg cagtcgaaac atagcaactg cgactacttc aaaccaaata 240
acttgatcaa tatccgatc aagatctgga atacagagtc cacaatggag cagctatttc 300
agaattaccg cgacgatgag cgaaggatcg gcgaggagta tctgtcaagt ctccaggacc 360
tcaactgcaa cagcaagcca ttgatcaata tgctcacgat gcttgccgag gagaacatca 420
actacgcccc cttcatagtt aaaggtggtg gaatattaca tcagcccagg ttaacaaaca 480
aaagcgtatt tacttaaaac caagac                                     506
```

<210> 147

<211> 445

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (84)..(318)

<223> Area matching *Drosophila* ESTs AA541084 and
AA538937

<400> 147

gcttcaccaa aactgagctt ttctccatgg cgccgccgat caaaggcggc gagggtctaa 60
tagtcgaatc tgaatcggtt ttgtgagtag gcgctttgaa accgttaacg gagactgcgt 120
atatactcaa tggtatttta tattgcacta taataaaaac cacgtgacgc ccaattcacc 180
gcaaaaatct gtttttgaag tgctgctgtc agacaccgct tatttgctcg tgcttggtt 240
ccaaaattaa attaccaaaa ttaaaatacc ataaataaat aagaaagcga aggacaatgg 300
ccaccaacct gcaaaaggta agaaaggata ttcgagactg gtatcagtgg catcgcttaa 360
caatgcttca ccaagggttt aaaagtttgt gtttcgcaa ttttgcccct tacctttcgt 420
acaatgctct gtattggtgg ggctt 445

<210> 148

<211> 509

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (390)..(509)

<223> Area matching *Drosophila* EST AA951890. This EST
has sequence similarity to mouse RIR2 gene.

<400> 148

ctcaaaacta attaagtggc gtttcatcag ctgttttctg gattagtcta gggttgtctc 60
attgcatgaa atatcgatga taaaaaatt tcaaaattta tttagtattt gaaactatta 120
atattaatat ttttcaagtg acaagctggg aagctaaaca taaaattgtg cagtaaggat 180
tcgatttatg gtttaagaaa agaaaactac caccataa ttgcattaga tttaccctaa 240
atttataaaa agtgaattga cgcactcgac agccctgatt ttcccatagt tttcccatca 300
ccaaaatgg cggaacatcg aaacagtttg ccgccggca taaaaccaa tgtagctgta 360
tttcccagat catttgccac acaactttca aactgtacac ttaatacacg tcgtgggtta 420
agtgaatttt accagagaat cagagaagcg cccctacctg ctaataataa tccattcaaa 480

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acatctcaaa tggcgtccaa ggaaacatt

509

<210> 149

<211> 490

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1)..(140)

<223> Area matching Drosophila EST AA439230

<400> 149

acccaaccca aaaaaaagag aaagaaaact gaacgaaaaa ctcccggaga aaacaacaac 60
acacaacgat aaactgcaaa agtaaacaaa ttgcgccgaa actaaacgaa tttcggaaaa 120
ctgcagccaa cggaaaaaag gtcagtacac agcgattgat tggccggaaa attaactaaa 180
ttaaagtaaa aaccctcgag tgccaaagtg gtgttgagca gcaaacacct tttaatagtc 240
ccccatttga ccttcacca tggacaccct cgcaaattgg tagcaccaaa gtcgggctag 300
cagttaaccc ttacccttga tcaccgttaa ttggaccccc ctcctcagac tatcatggtc 360
atggtcagca gggttgtgaa aacgggtcat ttattggagg gtgcgttacc ctttgcatta 420
tataaggcac gaaactcttc aatgaaaatc taatttcaaa gggattttta cccctgtaag 480
aaaaaaagta 490

<210> 150

<211> 522

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

110/586

<222> (3) .. (522)

<223> Area matching Drosophila ESTs AA948907 and AA92191

<400> 150

cgccgaattg aacgcacgta gcggaccgga cggatatcgc atcttccgat cggaaaaatc 60
gtacagtgca gccaatcgc cgtctacaga aatctattag cgcgcgtgtg ttggtgccag 120
tgcggtggca aattaaaaca aaaaacatct gcgaatttga atacgcaa atcatgctca 180
ctaagagcgc aaaagtcata gagtgcagaa tagtgaattg aagaactttt ggacgcgcta 240
agagtcgctc tccatcccca tctctctctc tctctcttgt gtgtgcagtg ctagtgtgtg 300
cgagtgtgag tgagacgggc aaacaatttg ccgctaaata caaaaagcag ctgagaccag 360
ctgacgcatg tgtatgttcg aaatacaatt aaagttaaca ggctataaat aaattgcaaa 420
tgtttatgta gccgtcaagc agcaacagta gcagcgcaac aacaaaacca cgtggcacag 480
acattttggc cacgatagta agcaaatacc caacccgatt aa 522

<210> 151

<211> 590

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (25) .. (76)

<223> Area matching Drosophila ESTs AA802379 and
AA246624 (inverted)

<400> 151

gtctagttta gagagcatca ttaccttoga ctttaaatta tcaccaattt atattccaac 60
gaaatacgcg tccgttcaag tcgaacagct ttctgttagt cagtgtgacc gtggcggagc 120
gctcttataa cctccgattc gccaaaacaa gccctaaata tgccagcaaa agtcagcaca 180
gcaagagaac tttgataagg agcggaaactt cggtaaccgc ctttcaattg cacatttcca 240
ctagatgagc taacaccttg ttccaactga gccacattaa gcacatcttg cagataatct 300

111/586

ctaaattcct ttaaaatcgt tatattatta agttttacta cacattattg ctaagtgatt 360
tagtatatcc gatgttatcc aactagtttc tcatattatg tatgggttcg ctttaaactt 420
gtttaatatg aaattaataa ttttttatca atagacctca aaacctacta ttcaatttga 480
acctaggtac tttttgggaa atctctacca ctgcagcaac gcttttctta tcgccgctaa 540
attcagagct taaatctacc agacttttcg cgataggaat gccctataaa 590

<210> 152

<211> 411

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (9)..(100)

<223> Area matching *Drosophila* EST AI404485.

<220>

<221> intron

<222> (101)..(178)

<223> Probable intron in gene represented by EST
AI404485.

<220>

<221> misc_feature

<222> (179)..(411)

<223> Area matching *Drosophila* EST AI104485.

<400> 152

ggcaagacag tttatattaa ttgtttacct gtgcaacaat cttttgttcc gcgaacaaag 60
actatatttg caattgatcc cgccgacata atcataaaag ggtaagcaat acgctgcaag 120

112/586

gccactggca ttgcgtcctc cgcttactaa cgtttcctac taactttctt cgctgcagct 180
ggagtcgggc cctagacatt tcttaatggg gaaaacagca tagccttcta catatgccac 240
cgggtcttcca tgagcattat caagatgagc ttgcacacac gggcgtagt gttctccacc 300
ttctttggca gctgcctggc tattggcctc ttgctcgtca gcatgaccac taatcactgg 360
gtgcggggcca ctccacgccg caagaactcg tcggacgcca aggggtgaatt c 411

<210> 153

<211> 561

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (60)..(449)

<223> Area matching *Drosophila* EST AI108647.

<400> 153

ctgcgcgtgc taagctccga gttgctaggt ccagaaccat actttttaga tactgtatcc 60
aaactccggg caatccgctg ccgctttata aacaaacagt taaacaaacc gaccgctcga 120
acgtcgccgt gtgtgtgtgt gcctgtgtgc ttttcgccct cattgtgctc tcgtgcaaatt 180
gaaaatttca ttgagcagaa agtcgcagca gcagaagcag cagcagcagc agtagaaaag 240
tggaataatcc taaagcggcg ccagcctcag caaaaaaaga aaataaatta aaaatctcgg 300
ctagtgaaat ttcagtccag aactagacgc cgcaattaag ccaaatacag accgaaccac 360
gacgagtcaa tcgctggaaa actgccaaaa cagccacgcc aatcgattgc aggcgttccg 420
caaattgaag ttcaaccggc gcagcttgta ccgctaaatc gatcgacaaa gatgcagtgc 480
ggctctggagc agatgaacga ctgtgagcgg tcggcgaacc ggacgaacct acgggtcaac 540
tttaacgaaa agggggcgga a 561

<210> 154

<211> 49

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(49)

<223> Area matching *Drosophila* EST AA951902 (inverted) .

This EST matches other EST including AA949796.

<400> 154

gtccgtcaca caacatggac gcactctcgc cacacacacg ggcgaattc

49

<210> 155

<211> 489

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(489)

<223> Area matching *Drosophila* gene RanGAP, accession
number AF143860.

<400> 155

gtctgaagcg tcatccagag ttctcggaagg cgctgtggaa gaacatgttt actggtcgctc 60
tcatatcgga gattccggag gcactcaagc acctgggagc cgcgctaatt gtcgcgggcg 120
ccaaactgac agtcctggat ctccagcgaca atgccttagg accgaatggc atgcgaggct 180
tagaggagtt actgcgatcc ccggtctgct actcgctgca ggagctgctg ctgtgcaatt 240
gtggccttgg tcccagagggc ggtagtatgc tgtcccgggc tctgatcgat ctgcatgcca 300
atgccaacaa ggcgggcttc ccgctccagc tgcgtgtgtt cataggttcg cgcaatcgctc 360
tcgaggatgc cgggtctacg gaaatggcaa ccgcattcca aacctcaag acttcgagga 420

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agattgttct ggagcaaaac ttcatttaca tcgaaggcgt cagggccttg ccgaatcttc 480
aagcataat 489

<210> 156

<211> 450

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(278)

<223> Area matching *Drosophila* EST AA940865. This EST
has sequence similarity to *Xenopus* chromosomal
assembly protein, U1367.

<400> 156

attggaccca atggcagtgg caagagcaac gttatcgatt ccatgatggt tgtgttttggc 60
tgccgcgcca atcgcatccg ttgcaagcgt gtctccacct tgatccactc ctcgtctagt 120
tatcccaatt tacgcagctg ctcggtcgcc gtccacttca agcagatcgt agacaagggc 180
gacggcacat gcgaggacgt gcccgactcc agcattgtta tcgaacgcac tgccatgtcg 240
gacaactctt cctactacca gatcaacgac aaacgggcgc agctcaaggg atgtggctaa 300
gctgcttaag aagcatcatg gtgggatctg gagcacaatc gcttctcat tctgcagggc 360
cgaagtggga gtccattgcc atgatgaagc caaaagggca gactgaaatg aaatgggaat 420
gttgaatac tggaggatat tgtcggaaca 450

<210> 157

<211> 349

<212> DNA

<213> *Drosophila melanogaster*

<220>

115/586

<221> misc_feature

<222> (117)..(263)

<223> Area matching Drosophila ESTs AA803314 and

AA941391. Theses ESTs have sequence similarity to
Human B-cell receptor associated protein.

<400> 157

cgtgagagtt tccaatttt gtacgtcgaa aaatcatacg tttattatca caaaatctat 60
agagagtgtc ctgcgtttac cgacatttaa tatatttttt aaattcctcg tcgcagaaga 120
caaacaagat ggcacagagc aaattgaacg atcttgccgg caagctgggc aaaggtgggc 180
cgccgggatt gggaatcgga ctgaagggtc tggcccgcgc tgggagcagc cgcctatgga 240
gtcagtcagt ccctgtacac cggtaaggat aaagccgata ggataaagcc acccgatttg 300
agggctaaaa gcataaacac gggcaatagc ggcattgtgca catacctca 349

<210> 158

<211> 511

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (209)..(405)

<223> Area matching Drosophila EST AA201448. This EST
forms a 856bp contig with ESTs AA438721 and
AA247046.

<400> 158

ctttgggctc tcacgccttt tctgctctct cctctctcga tttaaaactt gtaggacttg 60
tttcttgagc ttttttgcga aaacataaaa accggtaaata tttttttcga aactgcaggc 120
agagaaaaga gagcgagctg tggtgtgtgt cctgtatttg cattttttac ctaaccata 180

116/586

tttttcacac actttgcttt ccttacagtt ttctaaacac acacacatac agaaacgaga 240
agagccaacg aactcgcagc gacgcccaag aatgaaagag agcaaggcaa catgaaaatt 300
acagcaacaa caactggctt gccgaagaag ttgtaaaaga cgcaagagca gaagaagaag 360
cagccacaac agtatttttt attagcgggg tggtttttgtt gtcattgtatg tatgcacact 420
tttttccgtc cacactctaa tataagttga tcgttggtgt gtgctggtgt aattattgtg 480
atgcttgat atattgctgg tgtgctatcg t 511

<210> 159

<211> 492

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (37)..(243)

<223> Area matching *Drosophila* ESTs AA696343 ans
AA696180.

<400> 159

ggaccgcctt tcataacgta gtaagttttc gttgcgaacg gacgtagccc aaccaacttg 60
gccttaaccc ttgcgtcccc tccgatttat tccgcggcaa acacattcca gtggacagtg 120
gtgcagttca gccaagacc aacctacatt ttagctccct gcaaaccggt ttcttcatca 180
aataactatg gcgtccaacc gtgcagcgaa gtctggtttt gccgccgagg ccagcgcaa 240
agtaagtacc aaatagcaac aacaaccgca cccccaccc aaaaaccgaa gagcgccaaa 300
caaaacaaca caataaaca attgccaaa aaaaatcaac ttttgcacgg gtgtgtgcgt 360
gagtttagag ctgcattgac tttatttggc gctgcgttgt caagatttta tcttcgcgcg 420
ccaaatgcc aaaattagcc aaaaatggc ttgaaattgc cagcgtctaa caaggaatga 480
ctcatttcgc tg 492

<210> 160

<211> 580

117/586

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (261)..(580)

<223> Area matching *Drosophila* EST AA540783 (inverted)

<400> 160

gtttggccgt ttgcagggcg ccaactacga cggtggcata gaagttgatc tgggcttgca 60
gttgggtgggc tcgaggaccc agttccttaa ccgccttctg ggtactttgg cagatgaagc 120
cgaggaaggc gggattgctg gcggctctgt taataatagc agtcttggct agcgggaacgc 180
caggacgctg caacggggcg agccagtacc agtcgccatc cgatgaccgg agcctcatgg 240
tcttaacgat ctggacaaaag atcattgtct cgtgataggg cagaatcagg gccataactt 300
cgctacggtt atactcgtga acctggaatc gtcgcagcaa ccattcgaag gccatgtgtg 360
cggggcggag cagaaggtag ggcgaaagaa ggcgagaaa ctttgcaatg gccgcgtcca 420
gcatcttggt aatctccggc agtcccacgg aacgctccac gtcaatgtgg cctcatcgaa 480
caacgttagc tggaactcct tgaagccgga ttaaagtcgg tcaactcctgc agtcccgtac 540
ccgactcata aatggaccgc catccttggt ggccgctctt 580

<210> 161

<211> 494

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (26)..(267)

<223> Area matching *Drosophila* EST AA695850. This EST
overlaps EST AA698310 and has sequence similarity

to Rabbit FKB4 protein.

<220>

<221> intron

<222> (268)..(335)

<223> Probable intron in gene represented by EST
AA695850.

<220>

<221> misc_feature

<222> (336)..(459)

<223> Area matching Drosophila EST AA695850.

<400> 161

```
atacgggtctt tccaacgtgc ttgagcttgg tcaactctgcc atcatcgtgc gaattaaagt 60
tcagcagcca aaaatgccgg aagggaataa aatcgacttg tccggggacg gtggcgtcct 120
aaaggagatc ctgaaagagg gcacgggcac agagacgccg cacagcggat gtactgtgtc 180
cctgcactat acgggtcgcc tggtcgatgg cacggaattc gattccagcc tcagccgcaa 240
tgagcccttc gaattttcgc tcggcaaagg tgagtgtgtc gccggcaaat tcgcgaaact 300
tctattttaat gtactcctgg ccaccggaca cctgcaggca atgtgatcaa ggccttcgac 360
atggggagtt gccaccatga agctcggcga gcgcttgctt ctaacatgtg ctccaaactt 420
acgcttacgg agctgccggc agcccgccag ccattccgcg gatgctactt gattttgagg 480
taggaatgaa attt                                     494
```

<210> 162

<211> 224

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1)..(224)

<223> Area matching Drosophila EST AA441346. This EST
forms a 1677bp contig with ESTs AA390646 and
AA696470.

<400> 162

gctccagcga taacggtact ccaatgtgct ctctcgacg cacacagaag catcccgcac 60
acgtacacca ccaccactgc caaaaagcaa atcctgcca acagccgcac ctataaaagt 120
gggcgtgggt agacccaagt tactgtaaca aatttgcaaa aagtgatgca tgctaattgt 180
ttaaacaat cccagctttc ctaatcaaat acctttgcga attc 224

<210> 163

<211> 541

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1)..(514)

<223> Area matching Drosophila EST AI0643375.

<400> 163

gcacagccaa aactgaagat tacatacaat ttacaatggc cgacgagagc atcacgcgaa 60
tgaacctggc ggccatcaag aagatcgacc cgtacgcca ggagatcgtg gattcgtcct 120
cgcacgtcgc cttctacacg ttcaactcgt cgagaacga gtgggaaaag accgatgtgg 180
agggagcctt cttcatatac caccgcaacg cggagccctt tcacagcatc ttcataca 240
accgactgaa caccacgtcc ttcgtggagc ccatcaccgg cagcctggag ctgcagtcgc 300
agccgcccgtt cctgctctac cgcaacgagc gtcgcgcat ccgcggcttc tggttctaca 360
acagcgaagg agtgcgaccg catcagcggc ttggtgaacg ggctgctcaa gtcccaagga 420
tcagggaacg aatggccagg cccacgtcac gtcttcgcg cccagcagca aagcaggaca 480

120/586

gcagcagccg gccagcatat tcaacatgct tgaccaaggc cagaaggact acatgcccaa 540
g 541

<210> 164

<211> 497

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (181)..(299)

<223> Area matching *Drosophila* EST AA540197. This EST
forms a 723bp contig with ESTs AA695503 and
AA941503.

<400> 164

atcgagttgg cataaaagaa tctggtcttc gtgtcgtgtt attcattcct taattgcgcc 60
ttgtttaatt tgtgggtgac ggaaatcgga gctcggcgac atcgccagtt gtgcaatact 120
gactccagcg gtatctgtta atccccaacc acttcgcaaa cgtattttct ttgccttgca 180
gatttgctga ctttgtcgtt cgagtactca gcgtttaacg accacaatga atcggcaggg 240
gaaattccta atcttgtgcc tctttgtggg cctcttctcc gcgaatttgt gcgaagaagg 300
tgagtctttg atcaaattac accgaattaa aatcgaattg aagacacgcc gaacactcat 360
ttctcaatta tgcactcgga cacacacaca cacacgcttg catgtgcatg cgtaccgtgt 420
gcgcaaacc ctcgcgtgtg tgccgccgtg cgggcatgtg ggtgtgtgtg tgcataatg 480
tgcgtgtgtg tggatgt 497

<210> 165

<211> 523

<212> DNA

<213> *Drosophila melanogaster*

121/586

<220>

<221> misc_feature

<222> (167)..(212)

<223> Area matching Drosophila ESTs AA979442 and
AA392418 (inverted).

<400> 165

gcccgagaa acaccacga atgactacca aatcgggatt attgggtgat taggcttaat 60
tggtggctat ctactgatg aggcgatggc cgtcagttgg gcaaggtagt aatgcaacac 120
ttttcacaca tctttggtgt tttctcgcgt tttttgttt aattacctgc tcgaaaatga 180
aatgtatcgt attttataaa tatcgataga tatcagtggc ggtgtgcccg ttgatgggta 240
gcacaaaaac accatccggc taagagatgg cattttgcgg tataaaaata ccagataaat 300
gctctagtgc ctagttttaa aaacattgcg taaaatctta aatattatta ataagtaata 360
aattagtccc tgaaatatat gatcattcac aattacaata ataacaacaa aagggatata 420
taaaagggca ctgtaagaaa agtcgatgag taaagtctga aacgccactt atcgatatca 480
ccatgactat gtggcagcac ttaattcaaa aaaagggcgg cct 523

<210> 166

<211> 414

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (89)..(159)

<223> Area matching Drosophila ESTs AA536378 and
AA392418.

<400> 166

tgtggaaaca tttatcgata attttacaaa ttagagggat ataaaacaat ttggtatatt 60

122/586

ttcatttcat acctggaggt atattgcggt gcacaaaagc ggtcacacta attgatagac 120
gcaaaagtttt aagtaaaatt tgggttttagt taggcaaagg taattaaaaa tgataaagga 180
gcgaaaaatg taacaaaaaa tgccgatatg ttgtattcta cgctctttta tcgatttttt 240
aaaatgcatt tctcattgtc cattcgatga aacacgtaag cggttgtaag caaactgaca 300
agatggcggc cacatctgct taattgaaaa tcgaaattaa atacgatata actagcctgc 360
cgacccaaat tgcaaacggg ttgggagctg gtgtaatcat aataatttgg aagc 414

<210> 167

<211> 570

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(570)

<223> Area matching *Drosophila* genomic sequence

AC004345. ESTs AI515537 and AI062109 match this
genomic sequence 50bp 3' to NPS0219.

<400> 167

gtcgagtggg tgctcaaaag aaccgaaagg acgaagggtc cttcaaacag gataaacaag 60
ccaggcaaac acgattgtca ttggcgacag gctttaaaat ctatagcgac aagcttcgct 120
ttgctgatcc tatattcatg gcaaattcat ttaatttaaat ctcccttaaag aggaatgact 180
taacatagtt aattgaaaag taaaatgggt agagtataac ttacacttaa ttatgtgtac 240
tttcacagag ttaataaaaag tactaatttc gaaatatttg aatatttggt tattcagact 300
gatcagtttt aaaattttta aatcgaaata ccagctagtt gttaaatttc aatcataatt 360
gggagatctt aaatgcagat ctgcaatagc agataacat cgtcacttag acttcctata 420
aacaatacct ttgcaaggat tataataata agagaggcat tcggtgagac ttcaaacgag 480
agataacgct cttgacagtt gctcgactgc tcgtttggag cccgaatcga agccgatgcc 540
ccggcttaag tcgatggcgg ttcgagaact 570

123/586

<210> 168

<211> 601

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(184)

<223> Area matching *Drosophila* EST AA390646. This EST
forms a 1705bp contig with ESTs AA440523 and
AA696470.

<400> 168

cacataccta agtagacgca cgagagctct cgtatcgca aaagcgtgtg ctttgttggt 60
gctcttccac tccctcgctc taagaggcgc tcccggttg tttttggtgt tattgccgct 120
gagcaaatgg cagaccctct aagcgggagc cgctggatgat aacatgtcgt aatggccaga 180
gaggtaagtg caaacgtgct aaaagcaaag caaagccggc aactacggct taaccgtttt 240
agttttcccg atcaccacgg taccgcaagt tactttgcca aaatcagctg ttctcattc 300
atcaccatcc cccatcatte acatctgcaa ccaacgggtg tagcctctcc caacattaaa 360
acagttaacc ctatgtcata tttttccaaa aaagttaaac ccaacactac aacttaataa 420
taaaaatgct gcgtgtaaca aatagttatt ctctgtagga atgaattttt taattaagca 480
gtagaaacaa aataatcaaa aataatacta ggtaatagat tttttttaat aacatgcaat 540
ttgaccaagt aaaatttata atatattcta atatttcttt gacttggctt ttagaaatt 600
t 601

<210> 169

<211> 467

<212> DNA

<213> *Drosophila melanogaster*

124/586

<220>

<221> misc_feature

<222> (1) .. (104)

<223> Area matching Drosophila ESTs AI064169 and
AA816652.

<220>

<221> intron

<222> (105) .. (309)

<223> Probable intron in gene represented by EST
AI064169.

<220>

<221> misc_feature

<222> (310) .. (467)

<223> Area matching Drosophila EST AI064169.

<400> 169

gttaggacga aatgagccga aagaacggaa accaggacac ctttcccaag acggagaaga 60
tgcagcgcta ctacgcggag cgcgagacca caggaccga gttcgggtgag ttttcctcgg 120
ttcgcaatcg gtacacaatg gattcagaaa tggaatctga gtaaccgggg ctcgcagaat 180
caacccccaa agccaaagga tgtgtcttct gcgcttaggg gttgctgttt ctgcggcgaa 240
gaaacgtaga aacggaatta gaaaaccgaa acagatttta acgatttttc ccacaaatcc 300
ttgctcccag acgategcct gataaagctt gtgcgcgcca atccggccat ctatgatgtc 360
agccatccgc actatcgccg taatccggtg cgggtggaca tatgggatcg cattgccaac 420
gaactgggcg cctcctgtga gtatattgca tttttatcca ctgcgta 467

<210> 170

<211> 288

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1)..(288)

<223> Area matching Drosophila EST AA439345. This EST
forms a802bp contig with ESTs AA949877 and
AA439626.

<400> 170

ttgcgaaccg aacagaacgt ggttgaaaat aatcgtagtt tttatactgt tataacggct 60
caccatgggtg cggcccaaca acaaccagct gccggagaac cttccgcagt tgcagaacct 120
catcaagcgg gatccggagt cgtatagcga tgagttccac atccagtacc aacactttct 180
cagcttgctg gaagtttttg cgctgaatcc cagcgaagaa aacaaatccc tggatgacat 240
cgtcatgttt gtcgcccagg tggctcagt ctatccggcc gtctgcga 288

<210> 171

<211> 350

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1)..(350)

<223> Area matching Drosophila genomic sequence
AC005452. EST AA979503 matches this genomic
sequence 181bp 3' to NPS0227.

<400> 171

ggcttgctgg tcagctcgcc atggcgatac tatcgtcgga agtgcttggt cagcactgga 60
cgtttgctga aacttgtttg aaatatctcc ggtcctttac gcatttaatt ctcttccgta 120

126/586

atctatattt ataatttaaa tggttcctttt tggttccttcc cttaccattt tccctcaaat 180
ttgtttacaa tatgtttttt ggggagccgt gcagcactgc tttctagaga tggtagtggc 240
gggaacgtat tggaactggt tcacctaata ttataccttc aaaatttaca gggctagaaa 300
tccagtagct aactattttac ataaccaat aatattattt taaagaattc 350

<210> 172

<211> 446

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(93)

<223> Area matching *Drosophila* EST AI293141.

<220>

<221> intron

<222> (94)..(169)

<223> Probable intron in gene represented by EST

AI293141.

<220>

<221> misc_feature

<222> (170)..(446)

<223> Area matching *Drosophila* EST AI293141.

<400> 172

cgccgtacag cgcacggatt gcagttgggc caacaacaag gcgcgagcat aaacagcgat 60
accaacatgg cgggcttcgt cgcggtgcac acgggtacgt atcttgcca tggcggttcc 120
gatccgccgg gcagacagcc agatgattga tgaccgtac ttgctctcag gggctgggaa 180
ctgcatcgac gaaacgaagt accagcgggt gattaaggag gcctgcctgc gcgccacgga 240

127/586

gaccccttcgc aacggcgcat cgcgcgtcga tgcctgcgag gcggccattg tgcggctgga 300
gaactgcggc tacacaaacg cgggctatgg ctccaatctc tgcattggacg gctctgtgca 360
gtgcgatgcg gctataatgg gatggctcaa cgcttaactt tggcgctga cgaacgttag 420
tcggtgaaga ccccatagac ttggcg 446

<210> 173

<211> 478

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (12)..(244)

<223> Area matching *Drosophila* ESTs AI107445 and
AA390813.

<400> 173

gtgcagacag agagagacgc gaatgtgaat taacaaacaa acaaaaatat ttgcgaaaa 60
agacaaacac aaaaagtgaag agccaataaa gtgtattaca taaacaaacg gagctccgat 120
atctaaataa atattatgga aatcgaccca ctgatcaata acgcccgtcgc tgcggtcaca 180
gcctctgcct ctgccgccgt ctctgcctct gctagcgtcg gcagtagcag caaggatgat 240
aacggtaggc ggggtctctag atgataagcg gtacacttcc agtgggttca taataaacta 300
taaaaataat aaaatatatg taaatacaaa gcataaagtg tagatacgtg ctcgaaagag 360
tcacactttc tcgttaaaga acttcacgtt ctatccatat tatatgatta ttatgtttca 420
aaatccttta ttaatcaaaa agccgaatta gacaatcagg aatatcttcc acccagca 478

<210> 174

<211> 528

<212> DNA

<213> *Drosophila melanogaster*

128/586

<220>

<221> misc_feature

<222> (12)..(478)

<223> Area matching Drosophila EST AA390942.

<400> 174

gttgcgacca gcactcgatg tagacgtacg cacggatact cgatctccca gttgtatctg 60
cgttagggcc tcgcatagtt tttegcgtaa tattttcggc ttcgcaattt tgttggtac 120
ttgatgaaat aacgtcagtc ggattgtata taacccaaag cagcggcaaa tcaatgtcgt 180
cagttgtata aataccacaa ataaacaaac acattcacia agagtttttg tgctttcatt 240
gcatagtac caagtgtgtt agtcacccat acagtttatt tatgtgctaa aatgcaaatt 300
caaaatcaca agaccaaaca agttgctaaa atgtggcaga ggaagccaat aagtgcgaat 360
aaaaataaat aaatacgcca agcgcagcaa aaccaaggcg cacaaaaagg attacaccag 420
ataaataaca ctgaagccgg cgtaaaaata gcaaaaacgc aaaaacacat ttcattgcc 480
acgagcgcag aaagcagcag caacaagaac taagccaaca gggccaag 528

<210> 175

<211> 539

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (11)..(103)

<223> Area matching Drosophila EST AA802688. This EST
has sequence similarity to 10Kda HSP protein
genes.

<220>

<221> intron

<222> (104)..(295)

<223> Probable intron in gene represented by EST

AA802688.

<220>

<221> misc_feature

<222> (296)..(389)

<223> Area matching Drosophila EST AA802688.

<400> 175

tcccgcatct agcgagaata gttacgccgg cacgtgtagt tgagtaaaaa gttcactcat 60
taacttttat caaccgctcc agtttgcatt taagaattaa aatggtaagt taaaagtgca 120
ttgccccata tgaggtttag aagacagttt gaaatcgaag gatgatatcg gtttttcgag 180
aaggttccac ggctttcggc ccacatccca ttcgccgggc tgttgtgtaa tcaatgagag 240
aaacatgaaa cattgaaaca tgggttaatt gttgggtctt ttttaatgat cctcaggccg 300
ccgctatcaa gaagatcatc cccatgctgg accgcatcct aatccagcgt gccgaggcgc 360
tgaccaagac gaaaggaggc attgttttgc cggagaaagc ggtgggcaaa gtacttgagg 420
gcaccgttct ggccgtagcc ctggcacccg taatgcccggt gagtatttcg ccttatcaat 480
gcagagatgg tcatctaata actgaacatc ccattctccg cagtccatgg caaccacat 539

<210> 176

<211> 541

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1)..(414)

<223> Area matching Drosophila EST AA392415.

130/586

<400> 176

cgtgggtccga aagcaacgaa gcaaatacgg caagaggcga gcgaaaaagt gaaattgaaa 60
taattccaaa tcaaaaatca aattcgaaat cgaaaatcgc aaatcacaaa gttggaagtt 120
gagtgagcga acgcgtgtgt ttgtgtttgt gcgtaagtgt ccctcagtgt gtgcagtgc 180
acggtatcgt aagacgaaaa gtaacggtaa ccgagcaatt ggggtgtaag ctgtcagaat 240
ctgtgcgcag agaaaaccga aagttttggc ttgttacctt gccgtagtaa tcaaaaatca 300
aaaccgaata ccggattcac cgatcgccat cctggcccg ccttcgactt tagtttaagg 360
cgctctgcca gcggttcgcc ggaacggtaa actccccca caccctgctg cccgtcgtcg 420
ttagcatacc gataccgata gaccaccgcc gatagcgata ctttcgaaat tcagcaatcc 480
gtgccccatt tactaggatt ctgttcggtt ttaaccctac gaagaaggag caccgcggc 540
g 541

<210> 177

<211> 66

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(22)

<223> Area matching *Drosophila* EST AA695619. This EST
has sequence similarity to human cysteine rich
protein.

<400> 177

gccacgtgca ttcttccact tctttttttc gctcaaaatg gacggtcgcg ttttctgctt 60
gaattc 66

<210> 178

<211> 542

<212> DNA

131/586

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (399)..(542)

<223> Area matching *Drosophila* EST AA142132.

<400> 178

```
ctttgtatgt atcgctgac gtatgcgcag tgtggccgaa cagggctagt gagaaatacc 60
agccggcgagg tagatatact aaaagtgtat tatttttagt taaaacagtg cattgtcaca 120
taaatttttaa tagcctcttt attaaactat atgagcgttg attgccacta tgaatatcta 180
agcaatatat tacattacaa tatggcaatt atattggcat ttggtactgt cgaataaaat 240
accaaaccctt gcagtgtgc ccatcagcta taccaaaaaa aaacttggca gcattgcgca 300
tcgtgttcat ttgaaatttc gaaacacaaa acattataaa taaattcaaa cgaaattagc 360
tcgccatgga aatgcgtacg ataaaaacag ctagacttta ttaatcaata acatttatta 420
tttacagctg aaggagtttc gattgctctt gcagaccgag cttgaatgac aaaatgcatt 480
agttgggttc gaaatattaa tgattggcta acaattatga tccttattat ttatacccca 540
tt
```

542

<210> 179

<211> 519

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (366)..(519)

<223> Area matching *Drosophila* EST AA536537.

<400> 179

132/586

ctccagccac actaacagct gatagggctg tcatcacccgc ccaattagtg atgagcgtct 60
ttttttaaga aggtgacgca aaaacggaaa aattactaat taaaattaaa tgaaagaata 120
atattgtctt aaaaatatgt gctttttaag gatttaatta tcactgttgc ataaaaaggg 180
ctcaactttt taataagtat tatgaaatta ctttttggtc caagaacgtt acctttaaaa 240
ttaaacaata tgattcaata aatttggttc actactattg gtgttggtca actatcgaag 300
gaacctcaac tatcgattaa tgtgaccgct caccactgac caccactagc tctgcagtac 360
aagcaacatt tggcatctct actgggtatc attttcttga tccgttaaag tgatggattt 420
gagtgataat agccagtggt gagggatcaa tacttttggt tacaagcatg ataagctatt 480
cggcgaaagg ttcccttggg caaggaaatc cgcaggatg 519

<210> 180

<211> 480

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (26)..(303)

<223> Area matching *Drosophila* EST AA264253. This EST
has sequence similarity to SNF7 genes.

<400> 180

ataggggacg gcaatcggtg tcgggtgacg catacgaaca acagctccca gacaaccaag 60
aaacgcaata gcagaaaaaa cttacttggt cgctaaattc gggtgaaaaa acagatcagc 120
caggatgagt ttcttcggga agatgttcgg cggcaagaag gaagtggccc ccaccaccgg 180
cgaggcgata cagaagctgc gcgagacgga gaacatgctt atcaaaaagc aggagtctct 240
ggaggccaag atcgaggacg aactgaatat agcccgaag aatgcgtcta aaaacaaaag 300
aggtatgaga ggagtgcgcc gaggtccttg gcttcctagt tggtcactca aatgggcca 360
ggggaaatga ctcatgtctt tggttttggt gcggccgcga agcctgcttc cagttaatca 420
agtattccca tactggccag caaatagaaa actcaataaa caatatgtat ctcttttggc 480

133/586

<210> 181

<211> 593

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (186)..(593)

<223> Area matching *Drosophila* ESTs AA441247 and
AA820771.

<400> 181

cagtggcctt tattgtttat atatatcttg ttgcaatac atgaacaata tatgagtcac 60
tattaaatta aaaaaattta tgggcaagcc agagcttatt taaagaccat aacaattcgc 120
tcgatctttt aaaataccaa attgacagtc cgaatataaa cggtcactta attcacttgt 180
ttacaaaata tttaccgcat attttcagag aaatttagtt ttaattacaa atttgaaaat 240
ccacttagcg tggagcctta aaactatgca acgcggtaaa atttccttcg ggaaaatcaa 300
attgaatgta aacgtgccac ccgcggagcc aaaatccaac gaaaccgagg cggaagatgc 360
aaaggagtcc actgaagcca gcggaaatgg cggaggattc aagaaaatgg acaaggagca 420
gatgattcgg cagatcgagg acgtggcccg aagatctgga gagccagcac ctcaggaagt 480
gatgggcac agtggtttg gtcgcaagcc ggccaaggtg ttcgacatca cgagcagata 540
gaaaaggcga agagtaccg cccggaatgg ccaaaaaagg gaggagtcca gcc 593

<210> 182

<211> 446

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

134/586

<222> (318) .. (431)

<223> Area matching Drosophila EST AA202196. This EST
forms a 1942bp contig with AI108811, AA950029,
AA202752, AA440491 and AA697007.

<400> 182

atttgaacca tcccttttca ctgttctcgg tagaggggat gtgaaaaaac cagcgactac 60
atcaacaaaa gcgtgtgtgt gaatataaca atctcgttgt tccctagttt agttgctaag 120
aagcatttta ataattgtga aatcccagta ccgaggacga caacaaatgt agattttttc 180
aaagcacaaa caactgcagc acgacgttcg tcgcccttcg ggagcgggtg tattggtgtt 240
ccgtgctgtt gtgtttgtgc taccaccttg ttcgatttta atgtgttgtt tctgtttttc 300
acatcaaagc tccgtatttt cgtgcggaaa gtgtaaatgg ccgtgtttta aatattattt 360
cggaatgggtg tctccgctat ataatcaagc tgtttgcaac gttagcgttg acgcccacat 420
ttgagcccac ttgtgtgccg gaattc 446

<210> 183

<211> 553

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (83) .. (319)

<223> Area matching Drosophila ESTs AI064123 and
AA263284 (inverted).

<400> 183

gccccaaattg tagcgccctt gccactgcaa ttacccaat gttttatatt aaactgcggc 60
gcagtttgga actcggaatc ttacttttca caacgggcag gaagcggcac aatttttttg 120
caattttgcg aaccctgct ttcgatgacc gcttagcgcg cgtctccttc gaatcactgc 180
actatggatg ggattgatcc tgtccageta ttacacatg ttcggttaca agagtctttt 240

135/586

tcggtgctta tgttggttaa aataagcaaa aaccaaggag cattttatgg tggagtgggc 300
accgccatta atccacgcat gaagcgctgc cagaggtttt ttgggaaagt gtgggccaga 360
ctcttcgcag aattagtaca tgattgcatt ttcagctgat taccttaacg tgttggttgg 420
gtgctagcga ggagagcgga agggggttgt atcacgaaat ccggatatat aatcggaatg 480
aaatcgggat ataaataact tattaaactg ggattataat ttacttaaga acacttttga 540
gatcatgggt ggt 553

<210> 184

<211> 89

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1) .. (89)

<223> Area matching *Drosophila* EST AA441173.

<400> 184

tgccggctga aataaattcg attgtgtgcg cgcgcgtttg tttgtgtgtc ggcattgtgc 60
tgtgagtgcg cagacaacaa aaggaattc 89

<210> 185

<211> 414

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (65) .. (414)

<223> Area matching *Drosophila* ESTs AA440852 and

136/586

AA541034.

<400> 185

tgacagacca atttcagacg tatgtacctt catacatatt ctatacgtat gtatatatttc 60
gtaccttctt tcgtcttaaa tcagcggatc tctgttttgg tttctgggtt tctcaatttc 120
ttgcacacca aaatcaccca tatttgtgtt atttgttaaa ctgttaaaca ctttagcata 180
gacactttgc aatgctaatt attaaagcgg ttacaataaa ttgtaattga atttgattat 240
tttagcggga tttgtgttag ctggctctat tccattcatt gaacaaaaat cgcgtctggc 300
tttgatttac ccgttgtgct gcgacgaatt tcactttcga ctgcggaacg atttgaattg 360
gatggatttg ggtttgtgga ggggcctatg taattcaatt caaattcccg gggt 414

<210> 186

<211> 131

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (2)..(131)

<223> Area matching *Drosophila* EST AI062640.

<400> 186

gacgccaccg aaaatcgacc ggccggaatt ttctgcacta gtgtgcaaaa agtttcattg 60
gccaaacgag agggaaaaaa gtaaattgtct tccggaaaat gttatatcaa ctgaagatta 120
tgaatgaatt c 131

<210> 187

<211> 536

<212> DNA

<213> *Drosophila melanogaster*

137/586

<220>

<221> misc_feature

<222> (1)..(77)

<223> Area matching Drosophila EST AA695507 (inverted).

This EST has sequence similarity to cytochrome C
genes.

<400> 187

gtcttaagtg gtgaacacca aaaattcttt cgtaattttt cacacagcta tggatcagtg 60
tgaccgcggt aaagtaagaa aaaataccac acgctgcaga aaatatgata ttgatacttt 120
caaatgcttg agtagaccaa ataaaaacaa acaaagtgtc ctattgttat tcgtcgtaat 180
aattgggaaa taaactctag cttaacaat aaagttctta aaataataat aaacatatat 240
ttttgttagc aaccgatata ccacatttaa aaaattaatg tacaacggtc accctacagt 300
gtgcaacaat caaccgactt aagtgttgga aaacaccggc ggaacactgg gtatcgaaac 360
cacaagaggg cgccacttgc gttgccgggc aacaaaaatg taaaaacaaa aaattttatt 420
aaaaaagttt attggaatct gcatgaaaaa tgtcaagcaa ggccggtaat ctgctttgat 480
actcaaaaat gaacgatttc aaatatcgga cactacaaat gatgctcgca atgaag 536

<210> 188

<211> 589

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (89)..(251)

<223> Area matching Drosophila ESTs AA736186 and

AA801973. Thses ESTs have sequence similarity to
Thioredoxin genes.

<400> 188

gtctatccat tcgaaattca ccttcaccaa acgcgacata cacatatgca aaaagagagc 60
gtatagcaat gagaagcgtg agcatcggag taaaaaatct ataaaagcaa ctgcgacgtg 120
ctcatttttg taaaaaattt agctgtgctg caaagagctg cccgagtggg aattaagtaa 180
cttttgtaca tttctaccgg ttccgtctcc acatctccca tccaacatgg tgtaccaggt 240
gaaagataag gtgagtcact tcaaccggat ctatggacgc atcacatccg tcatctattg 300
ggtaactcga tagcgctacc ctttgacccc tcagttccag ttacacgttt attttttcgc 360
tccggacttt gaaaatatgg cattggaagc ggcattccaa ttagcctctt actttgaatg 420
attggattcg ctacgctttt tgccatacgc tcgcccgcga atagaaggaa ctcatgttcg 480
gtctagacga cgagaaagcg gagagcaaac gaagaaagtt ccgaatagca gcacagcgaa 540
atggataatg atatcattcc atggaccgca aaacgggtct taacggaac 589

<210> 189

<211> 533

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(417)

<223> Area matching *Drosophila* ESTs AA697603 and
AA801716.

<400> 189

cgctagacca cgtaacgcca cgatttttcgc cggatccacc gattcgattc gattcgccgc 60
gatcgtcagt gcctatatat acagttccca acggagccga gcgataaaga taaatgtgca 120
aaaacaaagc gcacttagat aaagatagcg aagttctccc atgtggaagg cacagtgcaa 180
gtgaagtgaac acgagaacgc agttttgaat aggaaatagc aaagtactca catatataga 240
gaacccgaga cttggagtca gaatgcaa atgtggcgagca taaagtcgca aagcgtgaaa 300
atctacgata tatacagta tagtcgattc caagtgtcag ccaagtgaaa cccagtgtgc 360
agccgaaacc aaaccgaatg actatgactt ctacgggtgct ccaacggccc attcaagcca 420

139/586

agccagagaa gaaggccttc ttcaaatcga ccagcttctt gagagccgtt cacgatggcc 480
tggtccaatg agaactgcgc ttctctgcat cgacaacatc ggacttaaca gct 533

<210> 190

<211> 528

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(528)

<223> Area matching *Drosophila* EST AA950741.

<400> 190

ctctagcagt atgctgcgca agtcaaagaa acagccacag acggtggccg agaaggtcag 60
caagctgttg cccatccgaa cagagcgaca gcgcagagga ctccggacttc gatgtggcca 120
cggggccacg tctggtggac ttcgaggagg aggagtacga cctgccggat gcccggagca 180
ccgactttag gaagaggaac gtcaagctgc tctcggagca gagtgaccgc tacaaaggaa 240
agatcagcag tcgcaaggag ttggatgacg atgaggatga ggatgatgat gaacaagagg 300
tgtcctacga agaaagcgat gaggatgatg agaacttgac agactttaag cagaagttaa 360
atgctggagg agctgaagac tccgaggagg aaacggctgc tggacattcc gaatctggtg 420
aaggaagtga agagattgag agcaatttga cagactttaa aaaaaagttt gaggctggag 480
attttaagta tgatgatgat gaagaggagg atgatgactc tgaggaag 528

<210> 191

<211> 52

<212> DNA

<213> *Drosophila melanogaster*

<220>

140/586

<221> misc_feature

<222> (1)..(52)

<223> Area matching Drosophila EST AI063204. This EST
forms a 887bp contig with ESTs AA697347 and
AA201878.

<400> 191

cttccaagta cttttcacat attgcaagag cgattttaata tcgtaagaat tc 52

<210> 192

<211> 531

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1)..(44)

<223> Area matching Drosophila EST AA441029.

<400> 192

gttcagagcg tgaaaaatac gttatatgct gcaaaagttg tgaaacgaaa cgtatccgag 60
agatacaatc ccattgggag agcgagagcc aagcaaagtg cagtttccag aagcagatac 120
catttaaaca tatttataac ccaaccgaaa ccaaacaat aataaaggct gaaaaattcg 180
aatacaccca aaaaaacaaa ttttccaaca actcaacctc gacgacgacg attcgcaaca 240
caaactattg ttggattaac atttttttcg atcaaggtaa gtcgggtttac atatgctgtt 300
ttcatttttt tttttatggc catcattaac actcaaaagc attccgaagg ttaagttga 360
ctcttggtt ttatagttgg tatgtagctg tcttgagcc caaaaaccga caaaagttgc 420
tgtcagtttt ggatgtgact ctggctaatt gactcaagct ggtgttttca taattaagct 480
aatgaaccg accggtagta caattgaagg ttccgtagat acatatttca a 531

<210> 193

141/586

<211> 560

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(157)

<223> Area matching *Drosophila* EST AI114266. This EST
forms a 1141bp contig with ESTs AA949325, AA735675
and AA391495, and has sequence similarity to GMP
synthase genes.

<400> 193

agtggtgtgcg tgaggaagga aaacggggga cgcgaacaa cggatcgcg atttcgtctt 60
aagacaaagt cttgcgtgc ttatgcacgg tattccacgg ccttgccgac ggacttccc 120
gttctggaaa accgcagcca ggctaaaacg agagaagggtg agagtcgcaa tatggcgaaa 180
aagatccccg atcccagcca aatcgccatg cgggtgctgct cgcgccacaa ttccgaacct 240
cgcccgttga attcagcaaa caaatgtat atttactgat gttttagaac tttgaatatt 300
cctctataaa agttgcacat atttcacacc ccaatgcatt tcatttctct ctcgtccata 360
aaacattcaa aatgtattcg cgcattcgat ctaacaaaca tttattgctt tcgaatattt 420
aaaatttatt tattttctat ttcacgaata tcatatatac atacatacca tatttgcaga 480
acatttggtt acttcccagc taatttggtt agatatccca taattgcata taattcctat 540
tcgcaacgga cttattaaaa 560

<210> 194

<211> 562

<212> DNA

<213> *Drosophila melanogaster*

<220>

142/586

<221> misc_feature

<222> (1)..(562)

<223> Area matching Drosophila EST AA951648. This EST
forms a 1340bp contig with ESTs AA539581, AA802940
and AA263326.

<400> 194

atccacgcaa ggaaagctta attcgagcga aaaaaaattt acttagctct taatattttt 60
aaaaacaacg ccctcgctgg gccagtggtc ggttaactag ttagctgtaa gatgacgcgc 120
gtaacgagaa gtgaaatctc cctggacatg gagttctggg tggaggagct gtcgccggca 180
caattggcgt actacgagaa gattactaac gagcacaacg cggatgaaggg tgcactaaag 240
aacgcgggta gcgccaacga gggcaaggag ctgtttaacg gccaggtgtt ccaggcctac 300
tcctttaagg gcaaagtgtc gcaggagctc aaggaggcta cgctgcccaa aaaaccaccc 360
aagccgacgg actctccctc aacacccgcc gcccaaagcg gtggcacagg gcggggtcgt 420
ggcccgccca ccacgacaac catccaacat cgctacctg gagtcctccg atgagggaga 480
cgacgatatg ccgctggcca agcgactggc gctgtctgca ggcaaaaaag cagtggccgt 540
ggccaatgca tcttcttggt ca 562

<210> 195

<211> 528

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (26)..(137)

<223> Area matching Drosophila EST AA391135. This EST
has sequence similarity to human SEC61.

<220>

<221> intron

<222> (138)..(359)

<223> Probable intron in gene represented by EST

AA391135.

<220>

<221> misc_feature

<222> (360)..(422)

<223> Area matching Drosophila EST AA391135.

<400> 195

```
gttcattcgg tttttgaaat ttgaggcggt cgctgtgcag tgaaaagtga gactttctac 60
tgttcgcgta gaaagtgata accaagccac ccactcagtg cccagactag caacacaagt 120
ccggcaaaat gggaagtaag taaccgtcat cgccagacat cttccccaaa atcggggagat 180
gcagcgggttt ttgtgtgaag tgccgccctt gcaatgccgc tcgcaccctt gtcgctcatt 240
gcttacgtat acaaaaaaga ttcggcgtgc gccgctcgtt gtgtccgaaa atcgcaatta 300
attaataatg gcctgagaaa cgtaactaat tcggttgctt taattcacta ttgtagtca 360
agttcctggg aagttatcaa accgttctgc agtatactgc cggaaatcgc aaaaccggac 420
gcaagggtgtg tataaaaccg taattaagat gtaatcaaag tgtagctagg tatcccaatt 480
gctgctgtac catggaatgg tcgaattttc caacaattgc ggctttct 528
```

<210> 196

<211> 535 .

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1)..(124)

<223> Area matching Drosophila EST AA696531. This EST

has sequence similarity to C. elegans pro7 gene,

Z66519.

<400> 196

ggccagtacg caagtaaacc gcggcggcgt ataatacatt tttagtacaa tcctcactga 60
aaaccgcgca aaatggccga ggttgaagcc gtgcagataa ttgcagagtc tttgaagcaa 120
caggtaagag gatcacctgg tcgtccagtc atttgtccga cattttggca ctgcactttt 180
ctgcacttgg gatattgccc aactactata tatctcattt gtgaacgggg gccgcggaat 240
ctgtggcgct ggcaagaaca atggagtggc ctcttatctt gaggcacctg tttgttgtgc 300
aaagttcaaa aacacttggc aactgtaagt gtggttgttg ttgttttgct ggtgagaatg 360
tcccccgatt actccggtta ataaaagacg gagcggattt gataaagacc atgttccaaa 420
ggtttgggac cagcaccbaa accaattggc gcttgcagct gcgaatatcg ccgggggggca 480
gaataaaatc aataatactt taaccgggat tccgggcaaa tcacttaaga acggc 535

<210> 197

<211> 549

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (442)..(549)

<223> Area matching *Drosophila* EST AI124332.

<400> 197

gtagcgcggc tgcacttgta atccgctctc tcacgtactc tctctctccc gctgtctctt 60
tttgccgcag cgaattacat tggcgcgcgc atttttcaaa tgttttttta cggcgaaaat 120
aacgattttc gtcgctgctt gttttgtgtg ctgaaaatat acattttatg actatgtaca 180
cacgcacagg aagttgagag gggatttggc tgcccttgat caaggagatg tgtgggtttg 240
agttgggcgc gtaggaccat ttcgctccgt aattctccct aatatccttt agtttgtttc 300
tcagattaat atcaaaaatg cataaataat agtgacgggc cccttatttc tgttcaataa 360
acttgcttgt aatacagtaa atcatcagcg gaacaaaaac caaaggaact ctactaactt 420

145/586

ctctctttttt tcgcttccag gccaaatccg cagaatcaaa gaaggccaag aaggccgcgg 480
ccgccgatgg agattccgat gaggaaaagc tctggaggaa atcatcgagg gcgacagtga 540
aatcgaagc 549

<210> 198

<211> 667

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (52) .. (382)

<223> Area matching *Drosophila* EST AA949873.

<400> 198

gccggcagaa aaggaagaag aagaagctca taccattgcc gattgctgtc gcgttgcgct 60
ttcttcgttt ttttcggctg ccgaaactta tattttgtcg ttgtaatatt ttgcataaat 120
atataaatta aaacgcgtga cggaacaaca aacaaataac gaagacagca aaataaaagg 180
gcgaaaaatc gaaacgaaaa cgagtcgaat tactttcaag tgcaaatagt gtgcgtgggc 240
gtgagattgt gtgtgtgtgt tgtgtttgtg cgactgtgag tgcgtgtgtt tgtgtgcaaa 300
aaaaaacaga acgtgcaaca agaagcaaga agaagagcca tcagcagctg acaaaccagc 360
aataaaacga aatttcaata agtaagcaac atttaggcaa agctaaaatc caaaagcaaa 420
tcgaacaaga ggaaaaacta cctttggaag ccccgcaaag cagacgtaac aatgggcaaa 480
agcaacaaat ttgcggctct cagctaattg aaagcgaatg gtggtggttt agagcaatgc 540
actcgataaa aaatactaaa gcaatggcat aaaaatacaa attagaacgg gcagcacagc 600
agacgaaaac catattccac tgggaaaacg aaaagtcaaa tgagagaaaag agagagagac 660
cataatt 667

<210> 199

<211> 498

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> Complement((1)..(498))

<223> Area matching *Drosophila* genomic sequence AC006562

(1848-2353). This sequence also matches EST

AI133902 which has sequence similarity to
phosphate transporter genes.

<400> 199

```
gtttactcta aactcgtaac gatcccaaaa attcgacatt cggagtgcta agtgctcgga 60
tttttgaacc aaaacataat tgtgaaaatt gagaaacttg cttagtgtca tttttggatt 120
tacacattcg gatttgtact gaacacacat ttctggcgat taaaaggtaa tggttttaac 180
tttactgacc tatctatcca tctattctat atctatattg taataacggc gtgcaacttc 240
cgttcaatat cgggccctcc tttctatttg ccacttttct atgaacacca cttgcagttc 300
aatggatttc cactagtaca agtattactt aatttccttg cttaatccga tttgcgtgca 360
ttgaactttt catctttggg tatttttccc tgttgatggt gtagtcgctg gtattgggtt 420
ttatctttcg tttttttttt gtgttcgact ttattttgca ccaacttctt gtggttgaat 480
ggtttttttt tttgggttc
```

498

<210> 200

<211> 550

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(550)

<223> Area matching *Drosophila* Genomic sequence

147/586

AC005129. EST AI403609 matches 420bp 3' to
NPS0269.

<400> 200

gtctgcagtt cgcggcgctcg catttttccg ggatgttttc ttttggggag gaagtataca 60
atctgtatat ctcgatatcg attaagcata taagttatcg gatgcagtag ctcgccaggg 120
gtgacatacg ttagtcaaca tatcgataac attagtagca ctttaccatt attaacatga 180
ggggattttt ttaaattaaa ataattttat ctttgaaata atttatgtac ctaagtatta 240
tttttttttg gaaataaaat atacaaaact ttgtcgccga ttttttcttc actatacaat 300
gtttacatat attagatatc aacctatttg tcttgtaaa aatctatacc ccaccaaact 360
aaagatctat ttacaaaaca atttactcct cgtcaccaa gagtcctccc agttccaaat 420
cttctccggc agttccggtc aactgggtgt gctctgaata ccgtaagaat tttccgtcgc 480
ttttcgaact ccagcctgct catccgactc ggcggcgatg tgcccggcgt ctgggcccgtg 540
tgaaatgggt 550

<210> 201

<211> 527

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (299)..(375)

<223> Area matching *Drosophila* EST AA391470.

<400> 201

ggcaagggaa ttgttaattt tagtacattg cttagcactt catttaaacy cgcaaattgg 60
tgacacaaat atcgatttat taaggtttga actatttaat ttgtcgcgcc tttcagcttg 120
caaatagaag tatttacttt agacaatcgg atgacgcttt tgatttcgca tttgtttgcg 180
actgtgtgtg tgcgacgagc cttctaattc cgacaaaaag aagaagagca ccattcgggtg 240

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gcctaatttg tttcacttct ccggaatcaa gcttttccga tgcttgcttc tattaacctt 300
tatttaatat gactcgccgc gttcgacgat atttttgcag tagttatttt ctttttcgtg 360
cttgtgggag tgcacctett ttatgcccgc gtttgaagaa gaagcacaac gtagtaagtg 420
tttggaaatgg actgcggaat ttaagggatg gggaatggcg taactcttgc aatcgatagc 480
tcgataggtc cccttttcgc gtttcgcaac acttgggccc ggatttt 527

<210> 202

<211> 77

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(77)

<223> Area matching *Drosophila* EST AI062013. This EST
matches *Drosophila* gene NURF-38. Accession
number AF085601.

<400> 202

attcagatag aacggaagcg cacgaaatca cactgatgg ctctgtacga aaccgttgag 60
aagggcgcta agaattc 77

<210> 203

<211> 562

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(76)

<223> Area matching *Drosophila* EST AA696584 (inverted).

<400> 203

ccttggtat tagtttgcaa atttccaagt aaatacgacg aatttggcga atcagcgaat 60
cactcgcttc ccatgctgcg gcacacactc acacgctacc acccacacga acgcatacat 120
atgtttgtcg ccggcgggtcc gacaacgctg cggcaatgca actctgctg gccacttggc 180
taattttggc tatttaccag ccaactactt tatagctagc tgcttatatc ttttcttttt 240
gattgttcca gtttaataat aataatataa tacaattata tttagaaatt taaatttttc 300
ataaattgtt ttaaatatgc ttacgatttt tattcttatt tatttcttaa aatattaggt 360
gactgggatt ttagcaataa aaacaagcta tataatagca cagcctgcat atgaaagcat 420
ctctgctcgt gttttttgcc ttgactgggt ggcaactccc ttggttttct cggctgacga 480
aaaatttgac ccgaaataaa tcaattaaat tgaaagtgga gtgaaaagca aattccagta 540
aaaaggtgcc aggtgggagg ct 562

<210> 204

<211> 416

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(319)

<223> Area matching *Drosophila* EST AA439099. This EST
forms a 1132bp contig with ESTs AA9493425 and
AA940848. ESTs have sequence similarity to GMP
synthase genes.

<400> 204

tttcggcttt aattcgcgaa aaaactgcag gaaatccaaa aggaaagtcc ctggaagcgg 60
ccataataac gcagccggtg aaaaccacag ggatttcacg gccagctgtg tcgagcagcc 120
ctggatactc ggaaaagaag ctgcagcagc cgaagaaatt ttgagtgtgt gcgtgaggaa 180

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ggaaaacggg ggaccgcaaa caacggatcg cgaatttcgt ctttaagacaa agtcttgcg 240
tgcttgctcac ggtattccac ggccttgccg acggacttcc cggttctgga aaaccgcagc 300
caggctaaaa cgagagaagg tgagagtcgc aatatggcga aaaagatccc cgatcccagc 360
caaatcgcca tgcggtgctg ctccgcccac aattccgaac cccgcccgtt gaattc 416

<210> 205

<211> 550

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (21)..(377)

<223> Area matching *Drosophila* EST AA695424.

<400> 205

gcgcggacgg tcggtttttg taattttgcc ggctaacaca cctttcgaac gacgcgtaac 60
ggtggccggg ccattaaaat cgccacaacc acgggcaatt cgagtgcggc gcgctaatta 120
tgcaaggctg agaactagcc acaaaaattt ggggggcagc aataaaccag ttgatttaa 180
ctagtttgctg agtgctgtg aaaaggccaa ggaatttggc cgaaagtagt agacaatagc 240
taggaggctg cgactgcgga ggattcaagt ccagaagttg tccgaccagt ttcggtgcc 300
cgtgtgctcg tgtgtgtgtg tgtgtgtcgg gattacttgg attacctttt attttatgtt 360
ggccggtgcc ttcgaagcgg agcgaatgag ttggagcagc tagtggccgc agagagatca 420
agagtgcgag agccagcgag agatgccctt cgtcagcgcc gtggtgcaac ccgtcaatgt 480
ggccaagcc acgcggccag tttgggccac gcattcggac gattccactg cacgccgggc 540
aagtgccgga 550

<210> 206

<211> 590

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (152)..(590)

<223> Area matching Drosophila EST AA440949 (inverted).

<400> 206

caccacccga tctggcgccc gatctttggc gaagcgagct acgtgttaag ttctcggcgt 60
gatgactata acaatgagac agtttactta tctggcttac acttcaatag gaaaacaata 120
cttttatata gcttctataa cttcgggggtg cgataagaac atgaatacag atacacggat 180
tgcaacagta cccaagccac ttgttttaaa caatacagg ataatgggga gtaatgtaag 240
ctattgactg gggtacaatc aggggtctga taacaatcaa acattgtcca gttgcctttt 300
gcgaatatca atgaccactc acgagttgca actgataacg attatcgccg cacaatgcag 360
tggttggtgta tttcactggg gggaactttt gggtccttag aaccagacg gattactcaa 420
tgaatatagg cgatatgttt gggtttacag cgaaagtgtc attaatgtcg acccgatatgc 480
tctcttttoga tgtgccagct ctctatttgc gggaatgaat gactatttta tgggtctggc 540
cgcgctgcta caatgctgca ttgctgcagt gggacatcct ttgacaggcg 590

<210> 207

<211> 312

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (132)..(312)

<223> Area matching Drosophila ESTs AI062455 and
AA440915.

<400> 207

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gaacgcacaa tcacaagcgc cgctcgcgag aacgagaacg ggaactcgaa agaacggaga 60
tcgctgggtcg gagaaccgtg gaacccgtgg aaccgtaacc gtgaaagtgg ggaatcgaag 120
atagaacgga gagggtggta ggccgattcc ctctcccccac tgcccgttga aattcagaat 180
actaagctct cggttaaacg cggcgaaaaa gaaagcaagc tctgagcggc tgaaaaaaaa 240
atgaagtga ataaaactgg ggatcgcggc accagcaaca agtttttagtg gctcttcttt 300
gtgcgttttc gg 312

<210> 208

<211> 311

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (68)..(311)

<223> Area matching *Drosophila* EST AA816432.

<400> 208

ctcgtgtggc tctcatttgt tttgatttct cggttacata ttacttaact aattagaatt 60
tattatgaat ttttcattga atttcacaac gagaaatcta gtgccacgac tgcaccgatt 120
caccagcaag attgccgtgg atgttgaacc agctgtggtc tctgccctgg aacatgccac 180
actgaagccc agaaaacatc ccggagtagt gagacccaat catatggaac tgccgaaaca 240
attgaatgat acgcttaagc gccatcgtgg ggggatcacc ccgtcaaaaa actaatccac 300
gatggccagc c 311

<210> 209

<211> 359

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(258)

<223> Area matching Drosophila EST AA979191.

<400> 209

tgttgaacaa tattttaaaa acatccaggc aggtgcttta tcccgtggca aggactttca 60
gccgcagcag caaccacggc aatgtgggga ccgaagctgc tgcgacagtg ggcgcacctc 120
cggcgacaag atcacccctt attctgccgc aagattacac agattgcttg ccggtgagca 180
ggaacacggc gcgccaggca tggattgaga acacggatgc tgtggcggag cgaaagggtg 240
gcctgattga actgctccgg gatgtctttg ccgcccagcc gcgcgtggac atcatacagg 300
aagaatgttg gaagtgggca gagcaagtat cgttatgtaa gcatggcgca caccaaact 359

<210> 210

<211> 415

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (2)..(318)

<223> Area matching Drosophila EST AA391495.

<400> 210

tttcggcttt aattcgcgaa aaaactgcag gaaatccaaa aggaaagtcc ctggaagcgg 60
ccataataac gcagccgtga aaaccacagg gatttcacgc ccagctgtgt cgagcagccc 120
tggtactcgc gaaaagaagc tgcagcagcc gaagaaattt tgagtgtgtg cgtgaggaag 180
gaaaacgggg gaccgcaaac aacggatcgc gaatttcgtc ttaagacaaa gtcttgcgct 240
gcttgtcacg gtattccacg gccttgccga cggacttccc ggttctggaa aaccgcagcc 300
aggctaaaac gagagaaggt gagagtcgca atatggcgaa aaagatcccc gatcccagcc 360
aaatcgccat gcggtgctgc tccgccaca attccgaacc ccgccggtg aattc 415

154/586

<210> 211

<211> 89

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1)..(89)

<223> Area matching Drosophila EST AA441636. This EST
matches ESTs AA820540 and AA817484. Evidence of
alternative splicing.

<400> 211

gccagaagct tgttgctttc tccactcctc tttcatcctc gtcattgtgtg tgagtgtgca 60
agtgtatgtg tttgctaggg ttagaattc 89

<210> 212

<211> 488

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (59)..(488)

<223> Area matching Drosophila EST AI295363.

<400> 212

caccggacgg ttgaaaagtg ttctgtgaaa aaatccaagg aaaattttgc ttgtttcaga 60
ttttgtcaag tcatggagct gccttcaatg gtggagcggt cgggtgatcg cttgggtgggtg 120
cgcagcttgg ttagtggtgc tccactttat cagtcactta ttgagggcgg agcaggtgct 180

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gtgcttcta tgtcccaaag cgtgcagccg ctaataggte aggacttttt ggagcaacaa 240
ctggagcagt ataaggcgaa taactttatg ttccactat cgatggccgg gtttgtttac 300
gcagactctg caccaccggg ggacttggcc aaggaaaata tggagaactc actgccagat 360
ggtaatccgt gcaacaacaa caacgacgat gagctgccgc agtgcaagat accggcgtaa 420
ctacagctgc aaccagtgcg cattcttcac gcaaaatccg cgcagtcate tctcgcatct 480
gcggggac 488

<210> 213

<211> 170

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (51)..(170)

<223> Area matching *Drosophila* ESTs AI114059 and
AA941565.

<400> 213

cgcgacgtaa ataccagacc cgagcggaca ttttttattt gtggagcgcg caacaagaac 60
gagaaaagaa accgaaacgg aaagcagaca aaaagagctg ctgccagtgt agaatcgcaa 120
agcaaagaaa gaagcaagtg cgtgtgtttt taaaccgaag ccgagagaat 170

<210> 214

<211> 480

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

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<222> (3) .. (355)

<223> Area matching Drosophila ESTs AA801691 and
AA441008.

<220>

<221> intron

<222> (356) .. (442)

<223> Probable intron in gene represented by EST
AA801691.

<400> 214

ccttagcggc gttccattca aaaactgcc ttaaagatta aaactctgga ttaaattggcg 60
ttatcagtcg aaattgaaag ggtaatggac cagggcaact gcctgatgcc cgacatcaat 120
atctgccaaa gcgacttggc caatcccacc gagcccattg tcaccaagat catggtgcac 180
tatctgcgga gtttcggctt tcgcctggag ccgccctata aaattggcac cgaactcggc 240
cactcgtcgc gggaggcgcg cgtctttctc atccgagtgt gccgccaagt ggagcgcac 300
gtccagatca gctttcccaa caagacctac agctatatgg acataattaa accaggtgag 360
ccggcagccg gtcttaagaa cattaaatgt aggaatttag atacaataag ctattattat 420
taaacaattc tctaccatta gctggtaaaa aaacgctcgc catctgagct acctttttta 480

<210> 215

<211> 471

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (378) .. (471)

<223> Area matching Drosophila ESTs AA950084 and
AA978669.

<400> 215

agcctgccag taatgccggg gtggattttt gttottgect ctttttcaat tcacttcggt 60
ccattgcatt tgtagttgat gttgttggtg ttgctttatt cgtttccttg cgggagaaca 120
tttccaattt tcatcctttt cgtgggtttt totcaaattc ggggttttct tttcctcttt 180
tcgcgtcacg tacgccgttt gttatatccc tctctctcgc gctcttgccg tcttgccgctc 240
tcgtgctctc tcgccggcat gagcgcgcac gagcgagacg gcggacgcag agatgagtga 300
aacagctgta agcgtcgatg agtataaaaag gcgggcgcac cggcgagaaa ttcatagtag 360
cttcgaaaaa aacactgaca cagtacacaa gaaaacagac tctcgcagcc agaaaatcaa 420
atgaagcagc agcagcaaaa acgtgcatag ccagactttt tccactgcta a 471

<210> 216

<211> 439

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (20) .. (236)

<223> Area matching *Drosophila* EST AI062945.

<220>

<221> intron

<222> (237) .. (291)

<223> Probable intron in gene represented by EST
AI062945.

<220>

<221> misc_feature

<222> (292) .. (439)

<223> Area matching *Drosophila* EST AI062945.

<400> 216

gtgcgaacta tacggcttca gcacgcgctg ggcaactact ggagcaccca ggcggacctg 60
ccggttcggy tgccgacggt gggccacgcy gacaacccca aaccaaagcc gacatcgagc 120
agcggagcaa gtgcatcggc atccgctgct gggggcacca agagtgcgga ctgagccgctc 180
gctacctcgt cagcttcggt ggacatcgca ccggcagcga ccaaggccaa gccaaagtaa 240
gcgataagag ttgcaagggt cgcgataaat agtaatatat ttctctcca gattcgcaac 300
gcttagcgac atgtcgaagg agtcgtctag tgacgatgac cagcaggcct tctatgccgg 360
cggctcagat cgctccggtc agcaagtgtc gggcccgcca agcgcaagaa cttccgggag 420
cagctcaccg acatgatgc 439

<210> 217

<211> 312

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(312)

<223> Area matching *Drosophila* EST AA440345. This EST
forms a 2293bp contig with ESTs AA201536,
AA539993, AA942332, AA979174 and AA202096 and has
sequence similarity to Human cleavage factor gene.

<400> 217

ggccggcaaa ttgttaaact ggctgaaatt gttaataatg ttttaagaaa ttgcgacacc 60
aattaaacca ccgcaatggt ttcgatgtgc aagcagacgc actccgccac ggcggtggag 120
ttttcgatag catgccgctt ctttaacaat ctggatgaga acctggtggt ggcgggcgcc 180
aatgtactaa aggtgtaccg gatagcgcgc caacgtggag gcgagcccag cgtcaaaagc 240
tgaatcccag cgagaatgcc gtctggcgcc caaaatggcg actgggaaat gcctagccac 300
atatacgctc ta 312

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<210> 218

<211> 501

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (10)..(501)

<223> Area matching *Drosophila* EST AA696930.

<400> 218

ctgctgactg tcaaatgccg gcggccttag atttttcgac tattttcaat aaaattgtga 60
aataccagtg aaaaattaaa gcaaataaat aaaatgcagg agcaggagat ggaggtggaa 120
gtgggggacc cggcaaaggc gtcgaatttg ctgcggctca tcaagcagct gctgctggaa 180
aaagcttacg atggcgtgcg gatgttgttt caaagtgcc aggaatcgga aaagaacact 240
cggctgctgc cccacatagc cattgggata tataccttga acgtgtgctt ggaaaacatt 300
tccgaccgag gtgaactccc aggagccaga actattcgac tgctctgacg agctgctcaa 360
gctgctggcc caagtacgcc ccaactgcatg agcttatgct ggaactgatg gaacgcttgg 420
aagagagtta gcagattcaa atggtgttcg gcgcctatct gcggccttac aaagttgtgc 480
tgcaacgaca gggacgcaca g 501

<210> 219

<211> 586

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (8)..(437)

<223> Area matching Drosophila EST AA440135 (inverted) .

<400> 219

```
ggtgcgaccg gcatgaaagt gacgaccggc tgcaatcatc aagccaatgg cgagatcggc 60
cactgcattt ttcaccaccc cgggagtgtg gcccaatggg attcccctct tctggaactc 120
cggaatatcc acaaaatcga ttccggagga catggtgctc acgcaacgca gctgggatcc 180
agcagcatcc aggattccgg cattcagggg ctggtaatgg gcccaataga tggcatccac 240
gccgggcacc ttctgcagga tctcatccct cgagggcggc acactctggc agatgatggt 300
ctccgctcca cgggatcggg gcagttccag agccggtgct gggacatttg ggtgcgaaat 360
cagcacttta aaagccctgg tcgcacgaga catttcgggg gaaaatatag cacttaatat 420
caactagtag cggcgaattg caaggctgaa ctaaagtggg aaattttcca aatgaccatt 480
caagcttttt ctgtgccccg ctcttaagct taaaagggt ctcttaagct ttacatttt 540
taatttggtc tcatcttttg gaaattcaca ttactatttt ctggcg 586
```

<210> 220

<211> 176

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (75) ..(157)

<223> Area matching Drosophila ESTs AI063979 and
AA802032 .

<400> 220

```
gaaggaagta agtagcaggc gtaattttat gtttcataag aatccgattt aagaatatat 60
ctcaacaaaa ccagcgcgat ggcattcggt gactatccag ctgagtacaa cccaagggtg 120
cacgggccct acgaccccg cgcgttctac ggcaaagggt agcagggttac gtaatt 176
```

<210> 221

<211> 169

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(144)

<223> Area matching *Drosophila* EST AA699194.

<400> 221

```
cattaaccag aaccaaccaa tgtttgatct tcttatacgc aatataagcg atacgttttg 60
ttttaaccta cattatttta tgaactgatt attaactgaa atggaaatac attgaacaca 120
tctagcttgt taaacgtata atcgatcctc catgtaaaga taaacgctg 169
```

<210> 222

<211> 546

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (507)..(546)

<223> Area matching *Drosophila* ESTs AA441233 and
AA392152.

<400> 222

```
caagctgggc gacttaaacg cgcataacc gataactgaa gtgggagagg taatggcact 60
tggtctctct aaaacttgct gcggtatttg gcaggactag ttgggactcg aaccagggcg 120
tgaatctttg cttgccaac cggtaaact aaccggttgc taaagtgggc caacattaat 180
aatatTTTTG ttgaatgttt cataaaagct attttaatat aaattcgcat cgttaccgat 240
```

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tcaataaggt ttagtaaate attatatattc tgactccata ttgatttcca acagcaaatt 300
aattaactcc ataacttccc ctctcccttt ggagcaaagg atgtagttaa tatcttaaca 360
tctaaacttg tttcgttttt ttattcaaatt aggagttata ttaaataaaa atgtaaaaaa 420
caaagcaggt tttaagaaaa tgatgtcagg agatttgaac tctactcat ggtccactct 480
aatccgcagt ctttgcaatt tactgtgttt ccaacttaac gcccccaagt taatagccgt 540
aatcat 546

<210> 223

<211> 474

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(79)

<223> Area matching *Drosophila* EST AA438352 (inverted).

<400> 223

gtaaatcaaa cacaaataga ttgcttctga aaattatctg gaaactcaga gctccgaaga 60
gacgatgtga acacgacaag ccactccggc agactgaccc aaacaaacgc cggcatttgc 120
aataatatta ttgtctaate ggtatatata tatcatataa gtaaccattg atgtaacata 180
cttttggggtg taaggaatat atagttgaaa agtaattcag aaaacatgca ataactataa 240
tttattaaat attaaagtat cttgctaaga ataatgatgt gcaaatacgc cttttgccag 300
agccatagtt atatcatatg cgttttgtat tctaaaatat caaaccaaatt aagatgaagt 360
taatatatcc gtagtacttt aaatcctgac ttacacgtca cttgtcgtct gcttagttgt 420
aatattctaa atcttttggg ttaatcagtg cagagttctc aggatgacct acat 474

<210> 224

<211> 534

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (480)..(534)

<223> Area matching Drosophila EST AI455428.

<400> 224

```
ttgatgctgg ttgtttaact tccatacttg tctctctcgc tttagctctc tcttaggagc 60
cccaactaac actaacagcc ggggtgttcgt cccctcttta accacttttt ctcttactct 120
ccgtctctca ctgcgaaagt gcagcgtgaa gtgttgataa ggggcacggc gggggataca 180
ctctccggga tattgcgctc tctattgggg ctctcttaca ctctcactac gcgttggact 240
ttcagttcat tccatgtgca aaatcagaat ctgatatctg aaatacaaaa atgacaaaact 300
attgtgttta gttttgaagt acttatccta acattgatta attttgcata gatatgcgat 360
tcatatactt acatttttat atgtttgtac gctatattca aattttaaat accgacaatt 420
tcctgatttt actttacgct acgtgttgtc tgaaaagaac caataatcga ttgattgtta 480
tagtttgtaa taaattcgct ccgcaagctt ctttatttaa gtgaccaatg aaca      534
```

<210> 225

<211> 507

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (11)..(190)

<223> Area matching Drosophila EST AA246916 (inverted).

This EST has sequence similarity to Mitochondrial
import receptor genes.

<400> 225

164/586

ggggattcctt acgctcacgg actttcttct tgtactcggg atcgctgcgg cgcttcttgt 60
cgaattaaat gcattatcca ataaacagag ttccagctac tcccgtgca atgccgattg 120
cagtttttgtt catttcaatc atattactac ggaaatcctc tgtattaact tggctcttatt 180
ttacattccg catgtgccat cgatttacat aaaacaaaaa tcgatatcgc ctacaactac 240
tggtgtttca tgtttttcac ttgtttcgca ctaatttgaa acggcggact ggaacactgt 300
tttctttttt aaattttgct aagggatatt tatttaattt taagtaagag atttaaagt 360
atttttttta gtttattcag aaatactgtg ggatcaagtt ataatacgt aagaaataat 420
cgtaagctca cttcttgtat tatatttatt aacttgcatt attcgcttaa aatcccctat 480
cccccaaac taatgttttt aattttc 507

<210> 226

<211> 376

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (233)..(348)

<223> Area matching *Drosophila* EST AA392258.

<400> 226

cgtgagtgtt taaaaaac aggcagcata caaaataata atattgaaag cgatacaaca 60
acaaaggccg tcccgtcgaa gacgaaacgt ccaaaacgga agaactggag agcctgtcca 120
gttaattacg gagcaciaag tagaatcgaa cagcaaaggt gagagagaga gtgaggaggg 180
ataggggtca acctggctct ctcgcaaaga agacgggggc gaggagcggc caaatgatg 240
atgatggaca ccatggacac ctcgcaatcg cagccgatgg acgtggctcc ggccgtagca 300
gtggcagcca cttcgggcgc agctcttggt ggactttacc gctgccattg gtgaagcatg 360
gcggccaccg cctaag 376

<210> 227

<211> 487

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(41)

<223> Area matching *Drosophila* EST AI296848 (inverted).

This EST has sequence similarity to Mammalian
40KDa V-ATPase subunit genes.

<400> 227

gaattcacac gccaggcaac ttttaagtga aagcagaaat tgatagatgg aacatgcggt 60
gataggtatt tctcggatga actgattctg atataaatac taaggattct agatgctaaa 120
ataatattta ttaagctaca aatatattta tatataatat ttaaatattc ggtggcggta 180
tctaccgatg cacgctagat ggcgctaccg atgggtgcaag gctgccattc gtttatcctt 240
tttgacaata tggcagcgct ctaacggttt tttaaatttt aactttaaat ttgaaaagat 300
attatttggt tggtttggtc gttttaaagt gcacccaact agattatttt agttataaga 360
aaatgcacct agttaaagct tgctatttga atttcagata gctattttatc ggccattctt 420
aacgcaattt ccgcacatgc gcctggagga tgctgtacgg aaatacctgg tgctctgggc 480
catgatg 487

<210> 228

<211> 354

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (255)..(354)

<223> Area matching *Drosophila* EST AI388389.

<400> 228

tctactgacc actcacaaat cgggactgaa cactaaaaac tgaaaactga aaactcggac 60
tcggggcgct aaggagtcg gtcgtcggga gtcggtcgtc ttttgttgat cttgaaactg 120
aaattccaat tggtgattta tctctcggct gctgcgccgc ggctgcgctg ctgcagcgca 180
gtcccactcg atttgaccag cgaccaagtt tataaaactt tgagccaaaa tgcagcggcg 240
cacagttggt accaaaacgt tgcacgcgtc gtggccctca tcaaaacaaa aaaaaaata 300
taagcgaaaa tgaaaacgaa attcgggttaa cgtccacaga agctgacaaa aggc 354

<210> 229

<211> 471

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (335)..(448)

<223> Area matching *Drosophila* ESTs AA441471 and
AA540182 (inverted). These ESTs have sequence
similarity to Mammalian RHO GDP-dissociation
inhibitor genes.

<400> 229

gtacgaacca tgccactttt ttttcttctc tttttttgat aaagaaatgt gcacgaagaa 60
tgttaaaacc ccagacgaat gaatcacaca caccagctca cacacacaca cactcacact 120
gaggccggca catgaatcgt cactgatttt caagtagaat ttttgggagt gggtcttggc 180
ctgcagtcac ccaactacat acatttgcta tcaatgccag cttgtattaa attaataata 240
taatattata aatatTTTTT ttatgtaaaa tgcattggaa ggcaccgcac tcacacacac 300
acacagttgc aagttggcaa cgacgcgcac tcacctttta atatgcgaaa ttaatcaaat 360
agtacgatct ctgaaaatta atcactgaaa agttactgta tgtttatatt ttttaacaact 420
ttttgaataa ctaactTTTT taaaccaagc caataatata aaataagaat t 471

<210> 230

<211> 480

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (22) .. (242)

<223> Area matching *Drosophila* ESTs AA439855 and
AA567284.

<400> 230

actacaacca aacaaatatac taaaagtga tgacaagtgt gaccgcgggc gaaccgttaa 60
aatatacgaa gaacggctga cagggtggc gaggcatgg gcacagtttg tgactgaagc 120
cagaaaaaat actaagcgtg actaaaatta gttcagtgtg tacatgttaa aaattactta 180
aatatttttg gcaatataag tgaaaacaat acttatcccc gcacatcatt tacagtccta 240
ttgacatttt aagttgtaaa tatcgaaact accaaaacga aatatttggt aaattatgaa 300
gccctgacaa ctctgtagtc gataggcaaa agagctcgca ccatgagcct atcggttctca 360
gctgttttga acccaaaaca aaggggaagg actatcaatt ggaaatgttt ctggtgagga 420
ataataagtt ctgaagaaat gcaaaatatt aaaaagctga acggtccagt tcatccagcc 480

<210> 231

<211> 625

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1) .. (141)

168/586

<223> Area matching Drosophila EST AA941606 (inverted) .

<220>

<221> intron

<222> (142) .. (396)

<223> Probable intron in gene represented by EST
AA941606.

<220>

<221> misc_feature

<222> (397) .. (446)

<223> Area matching Drosophila EST AA941606 (inverted)

<400> 231

ccaaaggcat ccgatactcc cgaacttatg cgaaaaattg tgtcaaataag aaattttactg 60
gttcggtttat tgtggcccggt gtgaattgtg ttaataccgt ccgactcatt gaaacctttg 120
gaatattcca agcttaaaac acttgaatag ttcgccgtca acatccaaaa aaagattata 180
tacttttaggc tcatgttcac aaattagata tcattgtaac aaatggggggg atatgtttgt 240
gtttatggga aacttgatca catcaaaca acaacgtaac gagttcaaaa cattcttaaa 300
cacaacaaaa catttgcaca actaatacgt aatactcaac acaacattaa caaggtttct 360
gtagatacgg cttaagaata aataagagtc tgtaactaat taatgtaaca taaaatatgt 420
actaagtctg atagtaatgt agcgtagcga tcgcttaccg ctaataccaa atgtgagagt 480
tagtcgcagt gtggccacgt tacactttct acctgttgac actttcatgg tcaagatgtg 540
tcgcgcgtcc acccagtttt ttcactttcg ttataaaaat cctacgaaat tatatttcaa 600
cctttctaca cgcctttttt ttgaa 625

<210> 232

<211> 435

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (209)..(435)

<223> Area matching Drosophila EST AA392324.

<400> 232

aaaataactat cgtgatcatc tccccactcg ctctcaccca ctgcctaaa ataatgggtgc 60
catcaagagc gcagcgcacc tgccgtatat cgttctcttt tgcactcgct cccgctcttg 120
gagcactcga cagcgcacgcc ggcagcgcgc tgcagccggg cgagcattta agcttacgac 180
ttgacgaaaa tcaaatcaaa agatcgacaa cattcgacga gtgcagatca ccagctaaaa 240
gaaaaccagc tgagacatcg gaaaagtccg cagattttca cgtaacgcct taaagatttt 300
ccgtgcgggt cccgaacaaa ctaaacatta ttaacaaaca ataaacgaat ttgtagtgtc 360
agtgactttt gaacgcacga acaaattccc aaacacacca ccaaactga ctgtataatc 420
agccccaaga aaccc 435

<210> 233

<211> 393

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1)..(393)

<223> Area matching Drosophila EST AA264796 (inverted).

<400> 233

cgctattaac tgttttgatt atatcggcgg tgataaaacg accggcattt gttgttggtc 60
ctgctgctgc tgctactgct aatgtttcgt tctcggncgt tccccggccc gcttctgcac 120
ccaccgcccc gtgttcggtt cccctgccga agcttcggcc actgctgctg ctgctgctac 180
tgctaaatac gctcgtatta ctattaacac tattctcttt tgttttcggc cgtttcggcg 240

170/586

acgactgcag cggcacgaat gctttgtcac acttgcgctg ttttcgccga attatggcca 300
ctttttgcgg ttcttcgccg ggcggcccaa ttttggaagt agttgggctt tttttttgtg 360
aatttctgtg atttttccct tgcttttctt gtt 393

<210> 234

<211> 522

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(152)

<223> Area matching *Drosophila* EST AA540030. This EST
has sequence similarity to a Rat calcium binding
protein.

<400> 234

ccaatccaaa tggaatgcc a ttcaatgctc gtctgcgatt gttgaatgtt taaacaaacc 60
gatcggcgca caacacaccg tcaccatggg caataagtcg tcgcttttcc tgcggaacga 120
ggagatcgcg caaatccagg aggagactgg ctgtgagtac gatttctggg cgggatgtgt 180
gataaccttg ggctttttca accggagact ttcaatgcgc cgtactaaat cgaaatacgc 240
acttggaat aaattaattg ggccacgagc aatgcaaaca acaacatcgc actggagtgc 300
taaaagcatt tcgggtccaa gaccatggga ttgccaaaat ggattcgctt agtttcgatt 360
cgtcatttct ataaaaattc caaatctacg aactatatgt tcgtgttcta aaaaactccg 420
ttcaaattat gcagaactga gtctgagcga tctgtgcccg ccttatatta gcggtatatg 480
gacagatggg ttgcagcaaa agcaatttgc atttcaatgc cc 522

<210> 235

<211> 596

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (85)..(596)

<223> Area matching Drosophila EST AI109898.

<400> 235

agtttcccca tgctcatcta acggtgagcg catggcccca aaattcaagt acaacacaaa 60
cacaacacaa cgagggggccg aggtaaaaag cagcagaaaa gccagcagca gccgcccgt 120
cataaatcta gcaagaaaaa cctaattaat tcaattaatt actacaaaa tcataccggc 180
atacgttaaa taaaaacccg ttcggtctaa ttaaaattta ccaaaaatca ctgctttcat 240
ttaaagcgat ttaagtga attctattga tttgtataat tacataaaaa gtgttgcgga 300
aattgactct ctctatcttt ctctgcaaat tttcagcgcg cgatgaaaat tcgcaaaaga 360
tctgtattaa atcatcaata aaaatagcga aactaacggg gcaatgaatc cagctgtttg 420
aaatccgcaa cataaaagca aaaaacacaa aactataaaa caacacgcac cgaatcacac 480
ggaaacaaca acaacaatag gcatgctcct tattaatatg tacgaaaaaa cattaacat 540
aggaactgcg aaagttaata atggcatatg aatggggaaa agtgaaatac acacca 596

<210> 236

<211> 473

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (365)..(473)

<223> Area matching Drosophila EST AI259723.

<400> 236

acaccacctc aaaattgatt actcctaaca aaaaccgaaa aaatacttga aaaataccca 60

172/586

atcaacaaca gcacacaaca aataccaaca ttttccttat acaaacctca tctgattagg 120
ttcttcgtga aacttttcagt tacagcgccc tttttagagc agttagatca cagtcagtta 180
gtcgagagtc ttaggggttat ataaacacac catttacagg tcttcacagc actacaaacc 240
aaaaactgca agcaatcaca ccaaacaaaa gcggttatact ctaaacatta ctcttccaaa 300
ccaaacccaaa accccaccaa atcaaaaacc aatccaaatc gacacgaaca cgatcaacga 360
aaagatgcct ataggtatgg ctacgatgtc ggtaagacgg caacttccat cacgaagaac 420
ccgcgggtccc gaatgggagt tacctacggg tggctatggc ctgatcgaac ccc 473

<210> 237

<211> 141

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(141)

<223> Area matching *Drosophila* EST AI294469.

<400> 237

ctaagtcttg attgtgatta tctggaatat tccactggaa aacgtgccgc ttcccactca 60
ctgcagtcac agtctacttt cggttgagtg agtatgtgtg agagaaaacc tgcgtcctct 120
gtcgcgggggt cttgacactg a 141

<210> 238

<211> 355

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (145)..(325)

<223> Area matching Drosophila EST AA140945.

<400> 238

```
ggctatgggt tattgaccgc tcgatgtctg cgtttgggat tgcggtgag acgtaggaga 60
agtacgcgtt gttgcgctga attgagagtc ggcgttcgtc atgctcgcgc tgacgctggg 120
cgcgagtgtc attctgactc atagttttat tatttaagat aacaattcac tatgtattta 180
agcgatcttg catcgcatag agcgtctctt tcgctttcag attttttatt tagtttattt 240
tatttggcgt tcacttcact caaaacaacc gattttgtgc ggagcacgaa aaaaacgtct 300
tcacacgtcg gggatcgaat tatttatccc cgatcgaatt atttatcgtg ttctc      355
```

<210> 239

<211> 626

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1)..(331)

<223> Area matching Drosophila EST AI259816. This EST
has sequence similarity to Human Epsin gene.

<400> 239

```
caatatcatc gcaatcgcac tcgagagccc tataaaccgc atagagtgcc aggatttttt 60
gatatccata tcgtgcgcgc agctatacta ttttccccct ttgttgacgt cgcattgtcg 120
tcacgtcatc cttgtgaccg tgtctattcg agtccgaaaa aagaaagaaa agaaagtcgt 180
aaaatataga aaagaaaact agttgggggag gaggagtcgc acacacagac acacacatac 240
acagccgagc ggagcccccac cagcacaca cacacaacca aaggcgaatt gcagtgaagc 300
aacaaaaaca acaataacag aaacattgca ggtgagcgaa agagtaggtg ggaggggggc 360
acaaacatat tttctgtccc ttttctctg ttggggcttc ttttcttaa ataataattt 420
tccgtaatta tagatcccc ttgtctaaac gtaattcccc gctaaccgtt ttttacaact 480
```

174/586

ttgcttattg atagecgttc ctttggcctt tgctctttgt tgtttttttt acaattgaaa 540
actgccgtta gccggtcaag ttgattagtc catttggatc caggggtgcc aggggcttgg 600
tgaaactggg ttattttggg aagggg 626

<210> 240

<211> 433

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (209)..(433)

<223> Area matching *Drosophila* EST AA141103.

<400> 240

ttgggacgtg tctcagattt ctatcgacta gacatcgccg atattcgaaa atgctcttcg 60
aattatcgaa atgtaggcat actgcaattt acgcgcgcaa cgcaaaaatt caaataatag 120
aatatttggc tcaacaagac aggagacttt agatggaaaa atagaatcca caaaagcaaa 180
actatggaat aactaaaacc acttttcata aatagtacac acaatcgatt tatttcgttt 240
ctttttgtat ggcaaaaatt aatacaaaaa attaaatatt aaatgtatgt atgtatgtat 300
aaaaagctta aagcaaaacta tataatgtaa atttaattgg ctgtttgttt ctctcccgat 360
tgatctgtca gtatgggtaa gttagaaaga aaaggcaatc tcaagaaact catacggaat 420
ataattccac cac 433

<210> 241

<211> 401

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(98)

<223> Area matching Drosophila ESTs AA246767 and
AA141059 (inverted).

<400> 241

ttcgtgatta tcagcgtaa ttgtacaata ttatgattta ttcgagctgt aaatcttcac 60
agcaagcaca aactgtaatt ataccactta gaattccatt ttaatggctt tatttatggg 120
gcgtgcatgg gcagcatttt ctcgcttttt attttttttt tcttgatttt tgtatattta 180
tgagagtgcc gtctccggcc acaaaaagtt aatcccacta aatgccgttg atagtttata 240
ttacgatttg ttgtgctggc taaaatgaaa gatattgggg cattttaatt ttagaattgt 300
gacaaatgcg caactttttt ttaacggctg catatgcgac gaatgatcca agttctagtt 360
ttatgattga atttcattgt ttttcatttg gcttaatgag a 401

<210> 242

<211> 368

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (118)..(239)

<223> Area matching Drosophila ESTs AA441468 and
AA142226 (inverted). Sequence similarity to C.
elegans protein Z66496.

<400> 242

gggtggtacac aaaaatcgat gcaacatatt tttgggccgc ccaatgtcac ggatgttttt 60
cccaactttt taatgtgtta agctagtaga taatttatta tatatcctac aacttacaga 120
aggcggccac aatgcccagc aatcgacttc catatttgag ataccacggc tgctccggtc 180
caattggatc ttgttgattc ggccgtgcca gcagaccgct tatcttttcc gcaaacgact 240

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gatccgggaa atagacggaa ataggagaa atctaatgc aattaggaaa aatcgaagca 300
caatttttga ttgtgacgcg gcgggcgctt tttttaacac gcacacattg ccacgacaaa 360
aaacacac 368

<210> 243

<211> 321

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(82)

<223> Area matching *Drosophila* EST AA247070 (inverted).

This EST forms a 1366bp contig with ESTs AA567381,
AA568013 and AA540724 and has sequence similarity
to a *C. elegans* protein.

<400> 243

aaccagatcc gcagctgcag ccattgtctt ccaatctcac acgcacacac acacaggaac 60
aagcacgtcg gtggtgttgt tgctgttggt tttgttgctg tgctgtctga tgtacaatca 120
gtgttggtca acaatttcgt gcttgaattg gtcacacacg gttgccgtgt acgcggtgta 180
tcgataaccg atagtaaaca tgcattgggca ttggcgccac aacgacacgt ttaaacaatca 240
accaaaccac accgaacgta tttagaactc caacaaaata tctgctccac gttgaattta 300
aaaacatttt aattactaaa a 321

<210> 244

<211> 469

<212> DNA

<213> *Drosophila melanogaster*

<220>

177/586

<221> misc_feature

<222> (433)..(469)

<223> Area matching Drosophila EST AA802401. This EST
has sequence similarity to glycosyltransferase
genes.

<400> 244

ggccgagtaa caaggatgat ttggggctaa aaaacgcaa aagcgggcgc tgtcaacatg 60
tggtctaggg ttaccgcagc gcgcgcattt cgtgtgctaa aaagtgaatt ttagatttaa 120
attgagatcg agtttttaaa ataatggctt agattaccgt agtctttata tatatatata 180
gcaacatagg tgaaatagaa aaagtaacaa ataaatattg aacgtaataa aagagggttac 240
agaacatata ataaataatt aagttaatat aataataata aaccgaagat gttgaatact 300
ttagacttaa atagcaatac ctccagcgaa agcctccctt tataatttat caaaaaaaat 360
taacctatct atttggata ttcttttagaa ccgctttaga acattcatcc taccacgggc 420
acactttcgc ccaatcagct gagaaaatat tttaaagttt taaataata 469

<210> 245

<211> 383

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1)..(96)

<223> Area matching Drosophila EST AI135263 (inverted).

<400> 245

ggtggcacat gtgctcaaaa aggccgaaga cggtgggaga gggagagcga ctacggcggtt 60
gccagatctt tggatgatga cattcaatag ttacttttaa caaaaatagc tagatcataa 120
aatataatga attgcaggat acaaattcag ctgaactact ggtcagaaga atgcttgat 180

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taatattaca catagataca tagttattga cttagaatta aattttgtat attgaattgt 240
taggaaataa ctattctttt gtatcttaaa gaaaagaaaa ttattcatat taaacggatg 300
ttgtcttgag actgctaacg attttaatag acctgttaag ttgtagcac ataaaataaa 360
attattttga atccagcatt ttc 383

<210> 246

<211> 489

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (243)..(489)

<223> Area matching *Drosophila* EST AA695904.

<400> 246

aaccagaacg aaactccaat gcagtttcat tttgtcagtt taatcattaa acaaagaatg 60
cgcaaccgat cgcaactagc tcgtggactc ttgttctccc aataattggt atgttttcca 120
ttttgcgtta acatggaaaa tgtgtgaaaa gcttttctccc cctccaaaag aagcgtactg 180
aactaagctt tcggtgggta gtaatagtag tcgttatatc ttatttttct tattttacgtg 240
cagctgcaat cattggctgc gtcactttgg cgtcagctat aaactgggtg atcaactcgg 300
cggcctccaa aagctgcgca tctgtctcag acacttttagc caacgccagg agatggccaa 360
aaccgcgcatc aagatgacgc cgctgcgcaa gtctctgtcc tccaagggca ttgtgctacc 420
cattaatgcc gctggaaggt tcggtcattg caggcgcctt agcaggaaga agaagttcag 480
gaatgggaa 489

<210> 247

<211> 417

<212> DNA

<213> *Drosophila melanogaster*

179/586

<220>

<221> misc_feature

<222> (1)..(317)

<223> Area matching Drosophila ESTs AA246386 and
AA541060.

<400> 247

gccgtatgcg aaacggcgaa tgcgtcaac gcagcgtgc gcgaatccct tggcggcaac 60
tcctccgccg gctcgtcgac tgaccaggcc aagagcggcg aggacaccaa cggcagcctg 120
caaaatcaca tcgtggccaa tgccaaacgc atcctgatgg ccaaaatcga atacgaggag 180
gtgcccact accacgaatc ggtgctggag aacctcaagt ccaaatatat tgtcatcaag 240
ccgggaaatc caggcgccat caatggcttt agtggcaaaa acaacacagg caaacttggt 300
gggcgcaaat ggacatggtg agttacactg tgtaaagat acaacaaaat gttaaaatcc 360
aaaagttgct tgcaaagtgg cttttccctc gtccgtgttc ctcctttgtg ttgcaat 417

<210> 248

<211> 427

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (311)..(427)

<223> Area matching Drosophila EST AA264961. This EST
has sequence similarity to mouse Thioredoxin gene.

<400> 248

accctggcca aatgggcggt aagcttaaga tgagcgtgaa agcatagatt gctagtcgta 60
aacgctgaat gaattttaaa tgaatgaata tgtcaaatga gaatatttca tagttttaca 120
tattgtaatc cactaatata tcaataaaag tttaaatatt aagtttcggt ttttttctat 180

180/586

tacacattaa tggtcctct aaaaatagga agtcaaagag ctcgaaatat cgataccatc 240
acagtgtgac cgctttggaa ataccgcatt cggatatttt cttagcacga atttggacta 300
aatgcatatt acaagtcac tttaacaaaa aaaatttgca ttgaacgtta ataataacag 360
ttacttgctt aaatccaatt cggctgccga aacaaaagct caattaatag aaacctaate 420
ctatcac 427

<210> 249

<211> 459

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (136) .. (293)

<223> Area matching *Drosophila* EST AA202880 (inverted).

This EST has sequence similarity to Calcium ATPase
genes.

<400> 249

cggcagcaga atagggaaaa caggcgacaa tcacgttaca acaacaacag cggcacaaac 60
agttcccgag agtgcgggag agggacgcaa cactactaac agtgggcgca tgcagcaccg 120
tttctttcga ctacgcgac agcttgagg ggggcgagg aggttaatt aaatgtgtca 180
catggagcac agactgtttt gattcacaaa aaaagatate gccttatttc acttatatgc 240
tcccgcgttt cttgtcggtg gacacgcgca acgcagcaaa aatgacgaat gcgatcgagc 300
gacgtgtaca gactgagaag cgtgcgaatg cgagagcggg agggcgccac taacagcact 360
gtgtgtgctg ttgcgacgca agcccaaagt cgcgagagca gcctcgatgc agctgatctc 420
caattagaat ccattccctg ttattgttat tgetggatt 459

<210> 250

<211> 438

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (74) .. (276)

<223> Area matching *Drosophila* EST AA263803.

<220>

<221> intron

<222> (277) .. (343)

<223> Probable intron in gene represented by EST
AA263803.

<220>

<221> misc_feature

<222> (344) .. (438)

<223> Area matching *Drosophila* EST AA263803.

<400> 250

gcccggagca ctggatttca cgagctccgc cctcgaagat ttgtgctttg cttgactaat 60
tggaatttat tgcaggtggt ctatatatat gagctgttgt gccggggcga ggatcccagc 120
agcgagagtc ccgaattttg gaacgagttc ttctgtctgc agccgaactt cgaggcgctg 180
gagaatgaga ttggcaaact caacaacgag cagctgcagc tggtgaaacc gaacctgaac 240
accctcttcc agaggtgcat cgaaatgctt gacacgggtt agaccagttt gacctattaa 300
tatatacctc cagccaccta taatccgtga tttccccagc aaagatcatc ctaagcggct 360
gtgcaacagc ctacacacgc tgtgtccctt gttctacggg atctttaaaa atccaaccaa 420
aaccacatt aaacatcc 438

<210> 251

<211> 387

182/586

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (3)..(166)

<223> Area matching Drosophila ESTs AA202200 and
AA202128 (inverted)

<400> 251

gttcactac tctacgctaa atggctatgc ttgtagaat tgcacatata ttttatgtat 60
tttathtagc taaacacgga gacatatcct tacacgatat ctacgagcga cgcgaccagt 120
gtgactgcgc ctacacaatt gaaacatgtc acatgcagtg tgaccgttct tgggtcaatg 180
gaaaagctct cactcatata aaattcaata atagggttaat aaaaaaaaaa tactgactta 240
ttttttaaat acaaacgtat ttactctaac aatataagta aaaagctaaa attattttaa 300
tgtttattta ggaaacctat cgatatatcg atacacatgt tttttggcc accctagaaa 360
ttgctaacgt atttttagca acaaatt 387

<210> 252

<211> 135

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1)..(48)

<223> Area matching Drosophila EST AA439530 (inverted)

<400> 252

gtccgatcca tatttttagca cagaaattaa gtaaaatatg gcggttagt ttgaagttct 60
ttgtttttgt tgctgccag tgttaccaag tgggtgaatt ccgcgtataa ttaggagact 120

ggagagtggg tcaca

135

<210> 253

<211> 207

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (28) .. (207)

<223> Area matching Drosophila EST AI109459. This EST
has sequence similarity to GPI- anchored protein
genes.

<400> 253

cccgagagga gcagacaagc gaactggact gggaaacagc agcagcagca gcagtcgttt 60
gaattgaata tcattcccca ttctgagcta aacgtcgttg agagccaacc aggaagaatc 120
caacggcgca ccatgccttc ggctgcaaat accgtactg ttaccgctgc aattgccacc 180
accgtcgccg ccacagccag caacacc 207

<210> 254

<211> 574

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (471) .. (506)

<223> Area matching Drosophila EST AI109779.

<400> 254

taccagacag ctgggcaccc gaaggagtaa gagagacgga tgtgaagaga gagtccctgcg 60
agagcgaaca aatcggagaa ggagcgagcg tgatatgaat atatctaatt actttcacct 120
ccttaagcat aaacttggtt caatttatga aatcttttaa gttactttct gcttgatagt 180
tattcataat tggtatatta taatgaatct tcgcacatgc ggcatttctg cgcaagtgc 240
tgaagagagt gaacaaggga gagagcggca agaacaagag aaatggcaaa caaacaaaag 300
ccacagacac agctgtctta tcacagggcg gttttctgcc accccctttt gacttgatag 360
caaagacaac cgttacttgt gggtttgtgt cttccgataa gtatgtttat aaaaattcaa 420
ttcttatatt ttatacata ttaagcattt ataacaagaa gagaatgcta tagtcgagtt 480
ccccgaatta tcagaatacc cgttgctccc gttacctaaa ttaatatatt atataccttt 540
aaaaccgcaa ctgtagaaa cttgttgga aaag 574

<210> 255

<211> 247

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (147)..(247)

<223> Area matching *Drosophila* EST AA141054.

<400> 255

ccccgcgc aaacgaattt tctttttccg gtgaactagg ggtgtgggtg gaaagagaga 60
gtgagaaaga gtgtggagtt ccgcttgccg gcgctttctt acaactattt tgtcattgcg 120
cctctctgcg ctcttccgc attccgcctc gttcattcat tcattagccg cgctctttct 180
tactctctgt gcgcatgcct tgtgcggcgc tgcttctgcc ggcgtcgccg tcagcgctgc 240
gttggttt 247

<210> 256

<211> 127

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (65)..(118)

<223> Area matching *Drosophila* EST AA141365(inverted) .

<400> 256

gtatgcttct tcgtatgctt cctcgatgc ttcgtgggcc ttatgagtgt tcacccacc 60
acaactcggc catcctgact agctgatccc ctgatcatgg ttacattga ttgcttagtt 120
gtatgat 127

<210> 257

<211> 1022

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (144)..(549)

<223> Area matching *Drosophila* EST AI063643.

<400> 257

acaacccaaa ataaaggtaa ggggaatttt taattaaaaa attagggaaa ataacaagtt 60
taagttgccg gaccagcca aaaaacaaac aaagcaacgc ttgtaaaaac tgaaaacaac 120
atttcagttt atttcgcttc gtgccatgtg agcaacttca aattgatatt gaatcggaat 180
cagtgtgcgg gtggtgctaa ttagcggaag acggcaattt attgaacgcg aaaaagccc 240
cacaatccaa cttccatttg gacacgaaac caaccacccg ccaaatcaaa tcgccgtcga 300
gttgtgcac aaatgaatgt gcgaaaagtg cagtaaatca atgtttttgt gagtgtttga 360

186/586

aagaagaaga cggaaggagc gccacaaca aaagcaaaga gagcaagacc taacgggaca 420
cccgaaacca aaaacctatc ggcacaacga cactttctca atagctatag ttttagttca 480
tatgttcata tctcggaaaa tggacgaggt ctttagccta cacatggaga aattggacgt 540
ttacgacggt tagtatctaa ttgcccggaa gttctactta aacgtagaac atatgtatat 600
gatggaatct gggttgtatt tctgattaat gagttcatca actttcaagg aaataataat 660
agtagtagta gttgtaaaca gctgaagtat tgggtataaa ataacactga tatgggtaaa 720
atcataatag acactttatt tgattcaaga ctgcgatgat tttagctgta tgaatcatgt 780
cgaaaataat agaaatcact attactaaat atagataatt ttaaaattta gattcagtgc 840
aacatggata cagtgattaa gtgttacaat ataaacaaaa gtaaaagaaa agtacaacaa 900
gaaacaagta tttggtgaga aatgataaaa actcaccaat aatgaaaacc atttatgtag 960
gattttaaca aacactgttc tcgtctgcat tagtgcttgt ctttgtaata gaattcgaac 1020
tt 1022

<210> 258

<211> 497

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(148)

<223> Area matching *Drosophila* ESTs AI107445 and

AA390813.

<400> 258

acataaacia acggagctcc gatattctaaa taaatattat ggaaatcgca ccactgatca 60
ataacgccgt cgctgtcgtc acagcctctg cctctgccgc cgtctctgcc tctgctagcg 120
tcggcagtag cagcaaggat gataacggta ggcgggtctc tagatgataa gcggtacact 180
tccagtgggt tcataataaa ctataaaaat aataaaatat atgtaaatac aaagcataaa 240
gtgtagtacg tgctcgaaag agtcacactt tctcggttaa gaacttcacg ttctatccat 300
attatatgat tattatgttt caaaatcctt tataatcaaa agcgaattag acaatcagaa 360

tatctccac ccagcaattc ataatctata taaaatatag tcagaatatt gcaatcatatc 420
caaaattaat accaacccca ggacttaagt ttttggtttt aatccaaata tatccatttg 480
tttctttgcc ttaattt 497

<210> 259

<211> 411

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(75)

<223> Area matching *Drosophila* EST AI297362.

<400> 259

tgtgttggtg tgggtgtagt gcttgtgcaa cttaaaaatt caattgttta ttgctgggca 60
aaactggtac cgtgtaccgc gtacctggaa aacaacattt aaagcgaacg ccaggcgaat 120
cgagagttcc gagcaagtgg gcaacaataa tgtgtcgctg cggcgectgc tcatttccac 180
cgtgataata atcggcatag ggttccgacg cgaaagccac aagtgaaagt ggaatgctct 240
gcttatccgc gttagtggc atagtcttca acaccagcg aattacatct ctccgactgg 300
atatgaagat atcgtgagta tttccctctg gaatcaatga aatgaaatgg tgtgcctagt 360
ctgtgatgat aaggcagcta ccaccaccac gtccatatcc ggatgcgagc c 411

<210> 260

<211> 230

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

188/586

<222> (96) .. (230)

<223> Area matching Drosophila EST AA392916 (inverted).

<400> 260

tgtgggatat tatattaatg gaaagccaca .accaaattat aactgtttgt aaactacatt 60
taaagacgta gttgaaatag aaagaggtaa acttacagat ttgaaatgaa tcagtaatcc 120
aataatgtgt tttgtttgga atatttccaa aatgtcttca acggaagagg caagaacaca 180
aacagaaacg gcacaaacac aaagagataa tttggcagca taaaagagcg 230

<210> 261

<211> 331

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1) .. (47)

<223> Area matching Drosophila EST AA201223 (inverted).

This EST forms a 2631bp contig with ESTs AA538867,
AA439491, AA390780, AA390983, AA201661, AA391700
and AA202007. Seq. sim. to Human nucleopore gene.

<400> 261

ctgcagcgtg tccagegccc taagcggtt tcccacttca atgaactctg tgacgaagag 60
agcggcgtcg agttaagaga gcacacgatt cgcggaagacg aaagtttctc ttcagacacc 120
gcatggaaaa ttttcagcac tcaccattag cccttttttag ggcgttttcc ggacgttgcg 180
tatagcgggc catttccgat cgctttactt acttgcggcg gcacttcaag ttgatttcga 240
tagcaggtct ggagcgtttt gagacctggg gctgctgaaa attgtataaa tcttcggctc 300
gcctacgtgt ggctgcaata ttaatgcaaa a 331

<210> 262

<211> 687

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (537) .. (687)

<223> Area matching *Drosophila* EST AI454966.

<400> 262

```
gagaggggata atgggagatg gcgaatagtg ggaaagaggc acctgaaata gataagcaat 60
gagcaccact caatttaata tggacaactg ggccatttta agaagcaaata aatgaatttc 120
aatttagttg tatattcttg agattaaatt atttagggta gcacaatgac acacatgcag 180
ggtgatgggc taagacaaag cctttaagag agagggagag tttgttgacc tcattctcgg 240
gggggttgagt gacctgtttt cgagtagttt tgagtgattt gttcccagtg tccaggtagc 300
ttgatttaaa ttagactgtt tattataact gcattgtggc ttttatatgt tttacacaaa 360
ccattcctaa gcgccctacc tatatcaata ttggtttgag agcagttgtg ctctcttaca 420
ctcaagtagc tcttttaatc tcttccactc attcgctact cagtcgccat ttttcgccga 480
gcgctgactt tctgccgttg ctgcttctgt tcattcgtgt gttggatttt gagatgcgtg 540
cacagctgaa aagtaaaata atgcaaacgg ctgtattttt tatatcttcg ggtccactgg 600
gtacatacaa atgaaaaggt gcttgctgtt atatacttcg aaattatcac gtttgcggtta 660
gaccgaaatt gaagaaatcg attactc                                     687
```

<210> 263

<211> 441

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

190/586

<222> (10)..(441)

<223> Area matching Drosophila EST AA202767. This EST
forms a 715bp contig with ESTs AA201231 and
AA392823. Sequence similarity to Rat NUP84 gene.

<400> 263

agccgggcaa cgaattgaag cataaacaaa cgatgtcgct caccgatgtc ttggaattga 60
acaaaacgga gttgttcgcg aagattcgca atgggttgcc cgtggtgcaa aggactcaga 120
acctgctgga ctgcaaggac gatctgctct ttgcctggca cgcgaaggac agctgtctgt 180
tggttcgcaa ctggcgctca tcgctggcgg caaaggtgaa tatccagttc cagacactga 240
ttccatcgag cttggtgagc ctggaggtgg accgcgtgct ggcctccaac gagggtccc 300
tcgtggcact aagttggacc gcgcggcggt gtcataatgg agctgccccg ccgctggggc 360
cccgatggat actacaagga tggcaagcca gttgatcacc tgccgcacgt tcgggctgga 420
cactcagctt ttcctaaaaa a 441

<210> 264

<211> 40

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (3)..(40)

<223> Area matching Drosophila EST AA201212 (inverted).

<400> 264

cccagtcgc gccgatatac ttcggtacta cggattgtgg

40

<210> 265

<211> 564

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1) .. (33)

<223> Area matching *Drosophila* ESTs AI404994 and
AI260898. ESTs show evidence of alternative
splicing.

<400> 265

```
atctcaacga ctctacttgt tattttacat aacctgcacg gcgctaaaat gagcatgtta 60
tcgataaaat atcgatgcaa ggcgtgcagt taagaaatth atttaaaaag gtataggtga 120
atacctacaa atgtaattca ttttaagttac tattaaatth tttctgacta tataaaaatta 180
aattaaatcc tcagaactcg atatgtcgat atgtaacagt gcataactac gcttattgtt 240
acagggtggt ataggctaaa gagaattgcc cgcataatth atttttaaaa ccattttctg 300
ctaaacgtgg tgtaaatat ttattttatth aatttaattth atgatttatg attttattta 360
ttaaagctg taagaattat attactgatt tctatgataa tcacgaagcc tatacttttag 420
cggttattca ctgtgctgcc tatcgttatc gaaagctttg ccggtttatt tacatttttg 480
cgcattaaac caagcaaatg ttttaaaaaa cctcaatttc cgtgtttttg cgccacagca 540
gcagcacaaa agaattcccga atcc
```

564

<210> 266

<211> 404

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1) .. (292)

<223> Area matching *Drosophila* ESTs AA539914 and

192/586

AA201959 (1042bp contig).

<400> 266

gtctcgtgtg acgtgcgagc gcagaaagtg tcgtctttag attttgtttg tgcacttttc 60
gccatttccc tttgtattcc gtcgagttag gaacagcgga agccagggag cgcaagagtt 120
gccgagaagc acctgcaaaa tagcggcagc agatcgccag aaaaccagaa aatcgcaaga 180
agcaaaagcg accgggtcaa cacttccaca cgcaaatacc cagagcccc catcacacac 240
acacacacac aaacatccaa cacttggtgc agtgggtgat gagaaggggc accacagcga 300
taagaggaga agggacgaag gagcaggaag aagaactagt tgcctaagaa agacaccacg 360
cgcattcttg tatcagcgaa ataccactg caaacgttta gaac 404

<210> 267

<211> 454

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (36)..(454)

<223> Area matching *Drosophila* EST AA440953.

<400> 267

ctctagaaag acaacaaatt ttttgccgag cggacgtgtc ggcggacaaa aagcttgcaa 60
acagaacaga acggaagaac acagaagaga acgacacgac acggacagcg gggaaaggtg 120
gcaattgaaa gaaagtgcc aacttagtgt gcgagcgaaa gagagagaga gcaaaactggg 180
tattgcttgt gtgtgtgtag tagtttagtg gtcgtgtgtg tgggagtttg tgtacgaagc 240
gagtggcaaa ggaaaacaca acaaacatta ttccaaggaa atttccaatc atgtcgggtgg 300
aatcctccag ttcggcggtc caacagccgc cgtcgtcctc gaacctaccg ctctggggcg 360
acaaccaggt tggttggcca cgaaccagct ccgcctcctc gggctcttcc tcttccacat 420
cgtcgtcctc ctctccggt gggcggcgca tttg 454

193/586

<210> 268

<211> 253

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (145)..(253)

<223> Area matching *Drosophila* EST AA264591.

<400> 268

gttcggcgct cagttgcgaa tctgcgacca aaacgtttgg agtttctcag gtaagcactg 60
gactctggga actggttttc gctgttatca gtgcgaccag ttgcactttg cactttgacc 120
tgcacctctc acaccagtca cattccaggc acatctctgc accaccggca acatgattct 180
ctccaagccc ctgtactcgc tcttcggcac ttatctggag cagctcttca accacccggt 240
ccgcaccaaa tcc 253

<210> 269

<211> 380

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (47)..(380)

<223> Area matching *Drosophila* EST AA539491.

<400> 269

gtttcggtcg tggacatgaa cggcattacg tttttcaact cggccgcgcg aataactcga 60
aaaaggcagc tccgcagcca aggcattttg aaaaacacaa gtccccgact cgaaacgcga 120

194/586

ccaaatattc ggtgtgtgac gcgaactgcc aatgcaatag ttcacttaag aattgcagat 180
taccgcgact ctgggcagtt ctcattegat atttgaatgt accaaaagaa aagtgccaga 240
accagaaatc aaaataaaaag atcttctaac agaataacaa gaagtgtttc ctccgaaaga 300
ttaaaaaatc gcgaatgatt aagaatcgcg gcaccgttag ttccctctct cgctttttccc 360
ttttgcgctt ttctgcgttg 380

<210> 270

<211> 398

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (202)..(381)

<223> Area matching *Drosophila* EST AI403737 (inverted).

<400> 270

ctctgttcgc caacccaaca acaaatcaaa atatcagtgg tggggcgaaa aaatgcgatg 60
agccatcgat agttcgataa catcccgca acaatctagc ggatgcaatc gaatttaagc 120
taagtgttaa atgggtgtaa atattacaaa tgtaatctta tcatgttcag ccacacatcc 180
ccaatcaacc tgatacagta ctttaaatat gacgtaattt tttaattatg cagtgaaaaa 240
gttacatcgt tgtgcactaa caaaagaaat accactcaaa gtggtaagat cacgaataaa 300
gctgcgtata aatattaaat aatttacgtt gtatttttgg taatgattga agaaacattc 360
gttggttaaac gaataaggcc tcacaaggct tggcgatc 398

<210> 271

<211> 496

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (270) .. (443)

<223> Area matching Drosophila EST AA567141 (inverted).

<400> 271

gctaaagccg tttttttctc ctgctttttg tttttcgtct gctttcgtgg ttctcatcta 60
caacatggca catcagtttt ttttttttta caatgtcaat taattctata ctccatttc 120
gaatgttttt tgaatacata acatacatgc tattttcaga caaacccaat ttattctgtg 180
tttctgccat gtgcttcaag tgttgccctc ttttcgcttc cttgtctta aatccggcga 240
ctgtacagta gttcagaatt tatgcttact taattgctcc ttctttctct gaagtgtga 300
cgaattgggtg aatgccgcgc aatcaaaca ctctcccg tcaatcgct tttaggcgaa 360
taaaagtgtg aataatgcca acagtttggg cagttaaaaa atcggagata tctccccgcg 420
acacaaaaag ccgtgcggac tgcgcgaaac accaaacagc aactaaaatg agaaacacag 480
tcccctgctt aaatat 496

<210> 272

<211> 546

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1) .. (478)

<223> Area matching Drosophila EST AI134670.

<400> 272

cccgtgcctg tggagctagt aaatttcgtg ctgcgcgctc atttttattt tagttaacga 60
aacgaacgaa ccagcggcgc gctaagaaat ccaagaaata ctatagcaaa aacactcagc 120
cgaggcggaataaataatttgc tgtagttctt ttttgctagc gtgtgtgccg tcgaaaaaaaa 180
aagatataat acaaatcaaa tttataataa ttttctccta tgcgagtacc gaaacgaaat 240

196/586

caatgagcaa agaatcgtgg gttttttttt tgcccatata cgaacaatta aacgaactct 300
ctttgttatc agtattgcac aaataaataa aacccaatca cacaacgaac aacgaaagtt 360
agtaaagaga ataccaacga aaaagttgaa aaagtcagtg agttgaaaaa agttaaagtc 420
ctgcaagttt gaaaattgcg gaaggcagaa agtaaagtct atatgaaaat atacttgtag 480
atattttcta cagcctgtgt gtgtgtctgt gttccgaaaa gcctctcatc ccaatctgaa 540
tcttca 546

<210> 273

<211> 534

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (413)..(534)

<223> Area matching *Drosophila* EST AA263763 (inverted).

<400> 273

ctacgtacta tttttctcca cataatatat atgtattaat actagttaga atatgaaaga 60
actgtttact caccagagcc tcgtgacccc aactgttgct cttttggtga tccttgagca 120
gctgcagcga tcggagaacc acttcgcccc gtccgctcgc gtagatgttt gtgtactccc 180
ttaaattttg ctccaaccag tgcgatatgg tgtacagctc ctgcgcgctc gtttgcgaaa 240
gctgccggaa tgaggtgtat tcatcgctgg aatcgctctc tatgtagata agatccagca 300
actccaccgg cttcagcgga gcactgtgct tcttgaggag catactatag tgctgactca 360
ggccttcgca gccggtgtta aacaaactgg tgacattctc cagctccacg ctctgggaaa 420
ttgttggtgcc ggaagtaatc gttggcatcg cgcagtttgg ctagtgctgc gaggaacacc 480
gagatgtttc cctccaccgg gcattgatga atcaactggc agacctcttg gaga 534

<210> 274

<211> 535

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(99)

<223> Area matching *Drosophila* EST AA568011.

<400> 274

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atcttgacaa aaatttttgc aagcgcataa aattaaacaa attgtagagt tgtggacaac 60
aaatcgccac tagaataact ggaaaaaagc gaaaatgggt agtactagac aaacgcgact 120
cacttgctcc gcagcagaga ctttttaact cgcaccaaac cgaagattgc gtctttcgtt 180
ttcccgtaga atttgcgcat tttttcgga ctttcacagt ggcggtgcag cgaccgctct 240
tgggcgccat aagggttaag gggcatgtgg gtggctacgg gtggagggtt ccgcggagca 300
ccccgtcgtg accttgctc catttgggac tacgacgtca cagctgccag ctccggcggg 360
tagatacaca tccgaattaa caccacgcgc tccgcacct ccgattcgcc gctctccatg 420
gaagtggaaa tggaattaca gccctttggt ccacatgcg gattttacct gggggtggaa 480
aggaaagggg ctgacccat agcatatgat catcggtatt ataggatagt ttctg      535
```

<210> 275

<211> 449

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (64)..(449)

<223> Area matching *Drosophila* EST AI107456.

<400> 275

```
gggtggacca cccttataag cgggctctcg ggccgcaaga ctctcataag cattcaagag 60
```

198/586

ttgcttacgt tcggttcggt cgcatttctt ctctatctta tataatatta tattttctcc 120
taaatacaatt ttttcactac caacaacaac aacaataata acaactcaac tattctcaac 180
tcgcgtcaac cttaacttaa ctttctcaaa aacaacaac tacaactcta ccactacaaa 240
tctgtcaact ttccgttttt aaactgaaac tgcaaaccac aacatttatt ttcgtctcga 300
cggccattga caaagttttg ttttcacaaa acccgaggaa gaaaaattgc cagcccaaaa 360
agatttgaaa ggatacccca aaagattccg ttcaaaaatc gtcccccccg ttatgttttg 420
agtttcaatt cccgtgtttg aaaaacaaa 449

<210> 276

<211> 479

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (212)..(414)

<223> Area matching *Drosophila* gene Karyophilin alpha 1.

Accession no. AF074957

<400> 276

gttcaattca actagttcgc attccacgac gacctctacc tatattttct agattatttg 60
cactttcgtt tagcatttga tcacagtagc ggcgaaaatc aagtcgcact cactttttat 120
ctgaaacctg tctttacgac tttaaattatt ctgttctcaa agaaatattt tttttaacta 180
tttcaagctt ttgaattgcc aagacgacga aatgtctgcc agccacaaac agcgttataa 240
aaatgccgcc ttggactcca cagagatgcg tcgtcgtcgc gaggagggtgg gcatccagtt 300
gcgaaaaaac aaacgcgaac agcagctctt taagcgacgc aatgtgggtc ttgagccggc 360
tacatcctca acatcagccg gagtggagag caacacccga taacgaacag cagggtttatt 420
ttgatcaagt ttgggctgat agcatagtct taactatctc tccattccca atgcaggt 479

<210> 277

<211> 533

199/586

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(146)

<223> Area matching *Drosophila* ESTs A!295205 and
AA141054. These ESTs show evidence of alternative
splicing.

<400> 277

ctcccgtcgt tttgagatcc gctgctctcg caacaacaac aactataact gtagttaccg 60
tctcttttgc atcgttcggt tttcgtttgt gtcgccaagt gattgtgtgt gtgcgtaagc 120
ttaaagctga ctaacaaaac gaaacaagaa aaaatataaa ttataggaaa attgttaaatt 180
tataaccaga aagagagcgg cacttacgtg tgttattgtg tgcgtgtgct ttaaaaagat 240
ataaaaatag caatagaaag ttattaaagc gttggcaaaa aagtccaacg aacagcgaga 300
ggaaagcggg gaacgaaata gttaaagcca aagtcgctgc cgacgtcgca cttgaaaacg 360
tcgcaaaagt ttgtaaacac accagtgtgt gttegtgtgt gtttttgccg gcgtgccagt 420
gtgcgtgcgc ctagaaaaga gtcaagaagc cgaagaaaag gaagaagccc gaagaagcag 480
caaaagaagc cgacagcaaa aagtaaataa aatccaatgc cccctggcag aat 533

<210> 278

<211> 506

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (8)..(382)

<223> Area matching *Drosophila* EST AA567704.

<400> 278

gtgccgccga agtggacaca tcgccgcata cggatacggg aacgcatagg gacagagatt 60
cgaatccggg taatatagcc ttagccaccg atttggaact gcccaagggg ctgccgttat 120
cggtatcctc gcgacaccac tggaaccagc tgcagagcag tttgcacgcc cttcaccacc 180
agcaacagca acaacaacag caactacgtt catacagctc cactatcgaa acaaatttgg 240
aagacaagat gagcaaaccg gattcgaaac tagataaata cgcgcagcgc gatcgccctgg 300
gccttttgggg cactggtgac aatgaggtgg tcggcagcct ctccggattc acccgactct 360
tggacaagcg ctactcaaag gtgagttcca caagttagga atatgcgaat acgcttttaa 420
gttgccccag ttccgttgaa cttagtggaa aaatgccagg caaaggtttt taagggtggg 480
ttcgattcc gttttttttt tccgct 506

<210> 279

<211> 362

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (74)..(224)

<223> Area matching *Drosophila* EST AA539252.

<220>

<221> intron

<222> (225)..(296)

<223> Probable intron in gene represented by EST
AA539252.

<220>

<221> misc_feature

<222> (297)..(344)

<223> Area matching Drosophila EST AA539252.

<400> 279

```
gctccagcaa tcaagcaacc gagtateggc gtcgcttcgt ttcgaatttc agttcgaatt 60
tggatttgtg cggcgacgct ctaatttgtt taatttttgt tcgttaattg tgttaattga 120
ttagttagtc gctgtgttaa tggaccacta agttagctgc gagcccgttt ctgtttagtt 180
caagttatatt ctgttttggc catccctcgc aatgagcgcc tttgaggta gttgagtcct 240
cttttcggaa ctccggcaat aattttccga gaaataacta gattaccggt acttacagat 300
cacagtgcgc ccatcgcgcc taaagcaaaa gaagcgcgcc gaaggaccga gcccgcccg 360
cc 362
```

<210> 280

<211> 548

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1)..(347)

<223> Area matching Drosophila EST AI260759 (inverted).

<400> 280

```
gccaaagcga tggcaatcaa cttttcgttg ttgtttttgc agtcgctcgc ttgttgctgc 60
tacacaggtg gctggctggt ggtgctgtgg cctctatttc ttgctatttc tctctatttc 120
tctgtattga tatcgaaatg gatgtcaaat aagccgctcg acgggttttc ttcaggagaa 180
agtgcatcgg aatgtgtctc cgtctccgctc tgcgccagct gttcgtctatt cttctcgtcg 240
cggtacttaa cagctccggt tatcgatggg tcattaggtg gtgcacactc atttattgca 300
atgccattta tggcctaatt gatttgcaag ttgcggccaa gaacaagtaa ttttgttagt 360
aaatagaggg cagaatggcc actttgttct tggcgagca tctggcaacg ctgcgggttt 420
tgtttacttc gataaggccc cctttacact agtttcgaat tatcgcaatt gggaatatat 480
```

202/586

ttcgactata tcttttttat ggcctaatat gcaaagcctg aataaataat tgatttaagg 540
aacataact 548

<210> 281

<211> 199

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(77)

<223> Area matching *Drosophila* EST AI260646 (inverted).

<400> 281

ggtcagacgg aacagcgcag acatcgcggt ggggaagaaa tttcagtcgc aaatttcgta 60
aataatcgag ttttcccttg atcgctggac ttctgacagc tgcgcagtgt gaacgtttgc 120
tgcaatttgt cagctggccg agagggtagc cactcgatgc ggtatttttt cgggtatttta 180
cctagaaccg ttttaattt 199

<210> 282

<211> 310

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (160)..(306)

<223> Area matching *Drosophila* ESTs AA202424 and

AA264609. These ESTs have sequence similarity to
Rat hydroxymethylbilane synthase gene.

203/586

<400> 282

gtcccgacat tgcggctgca atatccggga tagcggggccg cacaggggcc ggcaaatgcc 60
caacgcacac ttttctactg gcaaataagg gggcatcgaa ggccaccggg ggcagaaaaa 120
gtaggaatgt ctaatttact tgcttcaatt gtttctccag gacgaagatg gtggcgatgg 180
acgcacgctc taggcggaat actatgccct caatgacgaa acctttggat ccgctataaa 240
tggcgactgg gaggaagccc atgagactat ggtacgcctg ggcgggaatg gcgaaagggt 300
gcggaagcga 310

<210> 283

<211> 429

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (300) .. (379)

<223> Area matching *Drosophila* EST AA802555.

<400> 283

cactggacgt ccacacaaaa attgtactcg cgacgtgtga gcgtgacgca tgctgtacac 60
tcttaaccac acttaaataga gggcaaagca ctctcgcccc cagccgtgcg agtgagcgag 120
atgactatac aagcagcatc tgggcatagc gaggcagggt tgctaatagcc agtggtgtac 180
aaccatcggc ggtcatcgtg agtgggcccc ttatcgctat cgtegcctcag ctgttacgta 240
gcgtgtttgt tacgtcgtaa attttgtgcg gaaaaaccgc agagttttca ttgccgccgt 300
gaaaaaaaca taaataatgt ctgtgccttt cagtggcgca ttgcggcggt ccggcggcac 360
tgtgtccgcc attggcaagc agctgaagag cgtgaatttg aaggcgctca agcggataac 420
cgtgcagtt 429

<210> 284

<211> 573

204/586

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (322)..(573)

<223> Area matching *Drosophila* ESTs AA802438 and

AI063681 (1030bp contig).

<400> 284

ttgagaagca atggccgctg accaattgcc aggggttgcca gacatgccaa tagaaatggg 60
gaaggaagag cgcttttggg tgggtgttggg gtttttcaaa ttttttttct atttcttttt 120
ggaggtgcaa ggatgggcaa tcttcaacac aagtattgtt ggggcaccca gcaagtactc 180
ataagttttg ttgttgcaag gaaggggtga aacagatagg gagagagacg gagacagtcg 240
agagcgtaaa aataaaatgt gtactaggca cgattaatag ttgtagttgc acttcccaag 300
actcaaacac acaattatta ttaaatatat atatatttat atatatatat gtgcacatat 360
ataagtgggg aaacaaatat aactttgaat gtcaaggggc gaggttaatt tgtgggttat 420
attttcagag ggggggtttt aatgggtctt atttcgcaa tttaccgcca gaagctgcaa 480
gaacttgctt aatttgccc tgctgcgata taggttcgcc aacatcaagt tcaactgctga 540
taaaagctag ttctttgcgt aaaatgcgaa ttc 573

<210> 285

<211> 470

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (34)..(470)

<223> Area matching *Drosophila* EST AA438500 (inverted).

205/586

<400> 285

cacatgcaca agcacgcaca ctgctcggtt cggcctgcgc tttgtgtatg tgtgcgagac 60
tcttcttata tctaactgta gctgtagttt ctttcgcttt acgaaaacgc agaagatttt 120
cactttttat tggccccact cgctttgcta attattaatt tagctacctt aatttattca 180
gcaatcacca gttttcaatt gctcaacaca caaaggcgga cgcggacacg aacacgcaca 240
catctcgaag tcggacacaa aaggagtggc cgtcgcagtc ttgttcttcc agtgtctggt 300
gttggtgctg ttcttacgcg ggccgaaaac tcccttcccg tatagttttt tgtagccct 360
tccaggttc cataactata cggaagttat attgttgatt tgggttttat ctaagccgct 420
ttcagagcaa cactccgaaa attaatactc ttgggttttc ccttcgcttt 470

<210> 286

<211> 444

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (14) .. (153)

<223> Area matching *Drosophila* EST AI456286

<220>

<221> misc_feature

<222> (216) .. (348)

<223> Area matching *Drosophila* EST AI456286

<220>

<221> misc_feature

<222> (419) .. (444)

<223> Area matching *Drosophila* EST AI456286

206/586

<220>

<221> intron

<222> (154)..(215)

<223> Probable intron in gene represented by EST

AI456286

<220>

<221> intron

<222> (349)..(418)

<223> Probable intron in gene represented by EST

AI456286

<400> 286

gtgctgtgta taaattgttt ttaggaccta ggctaggaat tactggttgc acacactcag 60
cgccacagct ccaccgacca ccgcccttgc aaggacccac catgaactcc aaggacaagt 120
ccaagttcaa gttgttcctc aaatcgctgc cggcaggtaa caaagtgggt gcaccattgt 180
gggcaagata actcaattgg gattccgggg attcacaggt tacgtgggcg agcggaccct 240
gcggccggag tttgagaggg aactgcgtcc ggagcagccg gtggcccagc gctgccggat 300
gctgaaagag ctgggcgaca cgcagctgca caacttcaat ctggacgaag tgcgttccat 360
cgaattgccg ccatgccatg aacatgtttt tatttctcgt taattcgtcc ccacagaacg 420
ccatcaccat totgttcaat ctca 444

<210> 287

<211> 512

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (41)..(56)

<223> Area matching Drosophila EST AI062265. This EST

207/586

forms a1475bp contig with ESTs AA694862 and
AI064128 and has sequence similarity to C. elegans
UNC51 gene.

<220>

<221> intron

<222> (57)..(222)

<223> Probable intron in gene represented by EST
AI062265.

<220>

<221> misc_feature

<222> (223)..(353)

<223> Area matching Drosophila EST AI062265.

<400> 287

atctgagtgt caaggggacg ctcagcgagg ataccgtag actcttcctc gtgcaactag 60
gtgagattcg aaaatcctat ataaggggta gccctaacta ataattgtaa aagatcaata 120
taaaatgtaa cattaatatt actttagaac aacgaaatgt attataatta actatcagaa 180
gatcggaagt tatagtatac cattatttcc atttccgtaa ttctagctgg tgctatgaaa 240
gcactttata ccaaaggaat tgtgcatcgt gatctcaagc cacaaaacat tctgctatcg 300
cacaattatg gcaaaacatt gccagctcca tcgaaaataa ccttgaaaat tggtaagtct 360
tgtaatcttg taaaatctaa gaaacaaaat ctgttacctc ttttgaaagt tgttacttaa 420
aaaactgggtt attactacga aatcttcatg ttaatcaaat acttccactg ctacttgta 480
cttatactgc ctgcaacttt tctttattac ag 512

<210> 288

<211> 465

<212> DNA

<213> Drosophila melanogaster

208/586

<220>

<221> misc_feature

<222> (1) .. (429)

<223> Area matching Drosophila EST AA247020 (inverted).

<400> 288

gcgtggtgca cctgcggccg cttaaagatg aagaggaagt ggagttggag gaggaatgga 60
acaggaggac caggagccag gaggetctct tctcttcttt ttctcgttca atgacacaga 120
aatctttect ctctgtcttc gctttgtgcg ctccttcttc caatatacaa gcgagctttt 180
tatatgtgcg agtgcgactg cgaggccatc gctgcgttta tctccctctg tctgtgtgtg 240
tgtgcgtttg tgtgtgttgg agtgcgtgtg gctacacaca aagtaatatt ttcaagcacg 300
tttttcatgc acttcgagcc gttttttgtc tattgccgca tagaaaacga ataaacgcca 360
ctttcatcta caatttggtg ttacaattcg tgcattttg tgcacttttc actatcaaaa 420
accgtttaaa tcgttttcac cttgcgacaa gaaaaattac acacc 465

<210> 289

<211> 285

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1) .. (143)

<223> Area matching Drosophila EST AA264635.

<400> 289

gccagtagca gcaacaattc cagttccacg gacaacaatc acggaggcca caatccgctg 60
aaccgactgt cctgaagtc cgccggaaag cgtaatcagg agagcatgtc gcattcccag 120
ccgaacggcg gctggataaa cggttaaggcg gaaaaccgg aggaaaatca tctaaggagc 180
cgactgtttt atggttggtc gagagggggg ggaggggcac gcaggtgcac tgcgtctgtg 240

209/586

agttattgat ttttcacaca acttaagcag tgtcccaggg gagcg

285

<210> 290

<211> 575

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (58)..(491)

<223> Area matching *Drosophila* EST AA201749. This EST
forms a 877bp conmtig with EST AA803278.

<400> 290

tcgtggccct tatgtttcct gcaatcgatg tttctacctt cactttcgtt tccggcgtgg 60
tgcgtaagtt gtcgcggtt ttcgcaattt taagcgatta tcactttggt tgaactctag 120
gccggccatg tgcctataag ttaacagcaa agcatatcgt cgccattggg accaaagtaa 180
ctctcaaatc tggttcaatt ttaatccgta gaaatcttac atcatggaca attctggaaa 240
taaccgctac gagctgttgt tcatggacga cgatgactcc tctgggctcg cacagcccac 300
agattgccgc tgtagtcgcg gcgcccaga agccggaacc ggcaaaggcg ccaaaggcac 360
caaagagcaa gtcggagaag gagaacaagc cggttggtggc tgcccgcaag gccaacgctc 420
cggtggctaa aaacgctagt ccagtgaag gcggcaaggg tcccgtggc ggggatgtgg 480
gtcgtcccaa gaacccaaca gcaaacggtg ccaacaacca gggcagggtc aacaacaacc 540
aacgctacgg aaataaggag tcgaacggag aattc 575

<210> 291

<211> 460

<212> DNA

<213> *Drosophila melanogaster*

210/586

<220>

<221> misc_feature

<222> (1)..(162)

<223> Area matching Drosophila EST AA392551.

<400> 291

cactggcccc aagacgttgg aattttgtga attgttggtg ctgcagccca gcaataacgg 60
tacagaggac aacagtatca gcaacaaata caacaaaaag gaatgacaaa gtgaaaccga 120
ctgcgctgcc ccacaaacta cgacaacatt aataacaata ataacaaaac gaaataggaa 180
gagcaaaact gtgatctctg cttaactttt tttatttttg gggcaattgt tcaatttggc 240
tgtgctcaaa agtaaattaa gtcaactcgt tacgcgtatt tgcggtgttt ggcaacgctt 300
tttccaaccg acgactggaa aatcaattct tcggattgcc aaaggggaac aacaactagc 360
agttgttgaa gttttccttt atattttttg cggcccaccc caaaacaaaa agcctagttt 420
ttagaagaaa gaagaatgga agaagaaaga aagaacccgc 460

<210> 292

<211> 473

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1)..(379)

<223> Area matching Drosophila EST AA438539. This EST
forms a1200bp contig with ESTs AA201773, AA263752
and AA439563. This contig has sequence similarity
to Human ERF 1 gen.

<400> 292

ggttagagtg taataatgaa ataaccagcgt ttcgaatttc gttcacaaca aaagtgcggg 60
cctttcatgc caaaataactt tggtttcgaa ttgtttttca aattcgaatc gaggttttcc 120

211/586

agctttccag tttgacagcg agagaacgaa agagagcgag ggcgaattac ggtgttcgcg 180
ctctgtttgt gctttccact ccactccctc tcttaacttc cccccacca gcctatatac 240
tctgtgtgca tgtgtaaatg aatactttaa aacgttttta atcgttgcag tgtattcatc 300
gccagccacg ttaaaaggaa gaacgtgtta tggtgaatac gaccatcaga agatcttagc 360
gaaaggattc caggagccca aattcttaat ccccatccca cacacacaca tatactcgca 420
cgttaggcac gctctcttgt tgagaagaaa gggtttaaat taaagaagcc acc 473

<210> 293

<211> 446

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (297)..(446)

<223> Area matching *Drosophila* EST AA141715.

<400> 293

gccttaccog tttttattta tttttctttc tgtttgttta agttccctct tttctttgct 60
gattgtttcg ctttctgctt gccagtgtga gtgcaggagt aactgtgtgt gggcaatgag 120
ctcctctttc gtttgtcttt cgtgtgctgc tgtttatgta tatttaatgg cctgacttcg 180
aaattaaagc caccgacatc ggatgacgca ctggtgactg ggcctacaat agtggtagtt 240
gcgtgctca cattcttgct catggcgaaa tttttctttt tgtagagtta ctttgagtta 300
cgatcacagg gtgcctagtt tcatgcgaat agttgccaat tgtgggcaac attaaaaata 360
aattaaccga attggtctta tttgcatcta atttgcaaat atcagagttg aagaatgtgt 420
agcgaaatag gtatctcaaa aaccog 446

<210> 294

<211> 161

<212> DNA

212/586

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (80) .. (161)

<223> Area matching *Drosophila* EST AA695862.

<400> 294

atttaactta accacttata attgcctcct cgcagtccea tgttaactca gtttactgcg 60
aggcgtcgag gcgttcgtac cctttagtagt cagtttcaag gtcggttggtc gttaagaacg 120
catttcacaa ctggcaacaa ttaagccaaa ttaattgtat t 161

<210> 295

<211> 132

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (2) .. (132)

<223> Area matching *Drosophila* EST AA201517.

<400> 295

ctcgagaaaa cgtgggggttg aaaaaccttt gagcaacggt gtgccaattc cacaattaaa 60
ccgcagaggtt tgcacaattg gcggttacac ctcgatgtct gcccttattt accaaacca 120
ttaaccgaat tc 132

<210> 296

<211> 238

<212> DNA

<213> *Drosophila melanogaster*

213/586

<220>

<221> misc_feature

<222> (176)..(238)

<223> Area matching Drosophila EST AA202297. This EST
has sequence similarity to vacuolar ATPase genes.

<400> 296

ggctagattg accagcaaag cagcgaagag gaggagagaa gaaagcggga gagaaaagag 60
aaggcgaaga gaggacggca cttagttggt gttttgaagt cgaactgggt tacagtttagc 120
agtttagcagt tgcctctcag ctggctcagt gtttttttag tgttcgagct gtgcgtgtga 180
actgtgatat tgcgatattg ggctatcgca attggaaact ggacttttgg ttgaattc 238

<210> 297

<211> 51

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1)..(33)

<223> Area matching Drosophila EST AA567483 (inverted).

<400> 297

ctctgggggt tgcgccgcgt ttctgagcgt cacggtgtcg ttccggaatt c 51

<210> 298

<211> 468

<212> DNA

<213> Drosophila melanogaster

214/586

<220>

<221> misc_feature

<222> (1)..(209)

<223> Area matching Drosophila EST AA817479.

<220>

<221> intron

<222> (210)..(270)

<223> Probable intron in gene represented by EST

AA817479.

<220>

<221> misc_feature

<222> (271)..(468)

<223> Area matching Drosophila EST AA817479.

<400> 298

gttcacagca cttaaaagaa cacttgggaa aaacaataaa aatatttcgc aaattatggc 60
gaagcgataa gtcagccaaa aattgaatcc atcggagcga ctgccttgga gccacagccc 120
acccatgatg acgaccgact tcgcgggcag ccagttcgtg tccagcaatc ccaacaccag 180
ctgtagtgca tcccgtggc taacggagga ggtatttgca tggatatgca atttgaaaat 240
gatttgattc acatatttct gttgttctgt aggtctttaa actaatcgaa attgtgcagc 300
gcgacgaagc catctacaat ccgaagcaca aatactactt ttgccgcccc gtacgttgga 360
aaacttttgg ccgagggtga tttgaaactt ggaaaagaat ccgggcgccc agtctggcca 420
attggaacaa tttgcgcac tcgttccgac aaaaattcac cactatct 468

<210> 299

<211> 365

<212> DNA

<213> Drosophila melanogaster

215/586

<220>

<221> misc_feature

<222> (17)..(139)

<223> Area matching Drosophila EST AA441327. This EST
has sequence similarity to Rat sodium dependant
dicarboxylate transporter, AB001321.

<400> 299

gtcgcgcatt tcaccgtttc cgaatcggac gaaccgggag tgattgctct cctgctgctt 60
tcgagatcga gtcccgataa ggatataact acaacctaaa gaggaatcca agcctcctcc 120
tgccgctagt ttcgaaaagt aatagagta cttgttatca actgggaagc ggagatacat 180
agctccgata ttctctgtgaa agccagacaa acggatacca acgaacaatc gccatgtgag 240
tcgtcgtccc ttctcgtttc acacatcgtg cgataaaaat accgctttgc tttttgtgtt 300
tatttaaaaa ttttggttag gaagttgaac tccaactcct tgacgtttgc attttcccca 360
ccacc 365

<210> 300

<211> 432

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1)..(391)

<223> Area matching Drosophila EST AA698011.

<400> 300

ccgtcgcctt cttcgccctat cgggtgtgtgc gtgcgcctgc ctacgtgtgt gctgtgcatg 60
cgatttgtgt taacaaaatg tgattagcaa aaatacaaag aaatcaggca tagtggaaca 120

216/586

aggcattgtg gctgaaacaa cagtcggcgg cagtaacagt cgacactaaa aaacaacaaa 180
atatacacat atacatatat taataatagt acatacgaaa catatctttt gagatataca 240
cgaaatgcga aaatttgcac aaaaagcaat gcgctggcgc ggcaacaaag cgcggccgta 300
aaaaaataag ttacgccaac gacaattctg aattttgtgc tttatccgca gcagccagca 360
caattaaatt aatatttgaa ctacccccaa agttaacaaa agttagccag cccattaaaa 420
aaaaatacac ac 432

<210> 301

<211> 207

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (67)..(207)

<223> Area matching *Drosophila* EST AA951986. This EST
has sequence similarity to Human nucleolar protein
p40 gene.

<400> 301

gtgtatctca ataatcctcc cagtaagccg cgtgaaggte acaactgcaac atcgatagcc 60
gatgactagg ccagcaacaa tcgataattc ttacccccgc acgtgttgaa attgttttct 120
tttatttgga tcagatttaa tttagctaac ccagacatgt cggactttga aatggaggac 180
agtgcctcgg gctacgactc aggggat 207

<210> 302

<211> 186

<212> DNA

<213> *Drosophila melanogaster*

<220>

217/586

<221> misc_feature

<222> (1)..(186)

<223> Area matching Drosophila EST AI295731. This EST
forms a 2018bp contig with ESTs AI258429,
AA696170, AI109519 and AA391348, and has sequence
similarity to Mouse APG-1 gene.

<400> 302

ggccggacgc tagaaatttc cattcgcagg cgaaaagcga atccataatt gatgtgaatg 60
tgagaagcat atatcgaatc gaatgttctg gacttgtttg tcaaacgaaa agaacagatt 120
gcaagccgac acgtgcgtgg ctgtgtgttc agtatacatt atatctaatt cccgtctccc 180
ctctct 86

<210> 303

<211> 82

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1)..(82)

<223> Area matching Drosophila EST AA201430.

<400> 303

agaccgacca actggaggcc agatacagat accatcattg tcatttccca attgaccaga 60
gaaagaaacc tgctgcgaat tc 82

<210> 304

<211> 54

<212> DNA

218/586

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (15)..(54)

<223> Area matching Drosophila EST AA263209. This EST
has matches Drosophila ARP gene Accession number
AF132912.

<400> 304

ggccacctaa cgcgacaat tcggggacaa aatcaaactg catgcaaaga attc 54

<210> 305

<211> 1004

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1)..(140)

<223> Area matching Drosophila EST AA541045.

<400> 305

ccccaccgc agccactcac acacgcaaac atgaggctgt ttgcggcagc aacagttgcg 60
cttgtattgc ttctgggcca agcagctggc gaggagcttg cggaggagcg agcgggacag 120
gcacagggcg atgcggaggt gagtgtgctg gtgttgtttt gttatgattc agcagcgcg 180
ctatttccac atcaaaacgc tttcggggag caaaaagtaa cgtaatcccc ttcaaagtga 240
ctaaggcttg tgggcaggga ttacggttcg acattaagcg ggaaatatgc aattttacag 300
ttaactctca ctgctctca cccgcttacc caaaaacaca tacacaggag ctcacctaaa 360
ccgaacacac ctatactcac acacattcgc catattggct gacgtccctt gttttttcct 420
ctttgaagta cactgacaag aaaggatgtc aactgtccag cctcagtggc tgaagtgcaa 480

219/586

tttcaacaat gattttcatc ttcaatgaaa tctgcgatat tccaaacaaa aaatgtttaa 540
ttgcgagttt taaaaaatag ccatttcttg ctcttttcgc ttttctacgc ctgttttggc 600
ctttgtttat tctgcgacgt gtcagctgtt tgcttatttt gaccgataga accccattga 660
tccccagact gccgttgttt ttgcaactgc ttcttatcgg ggtattttta taggccccac 720
tagtccgttt aaaattgctt tgtgcccga attgcgtttt aatttctgcg ttaagtgtgta 780
cttccccaca agcgggaagg gaatttaaatt ttgcaaggct tttttttacg tccgttcaaa 840
cgcagccact gttttttctt ttgcggaaag cctgcaatcg aatgatgcta gcaagtactc 900
atagggtagt tatgaagctt acgaaagaat ggggatcatc ttcacagcc cactctatat 960
taagtttgcc accatccgtt ggacattaac ggtcacttag tatt 1004

<210> 306

<211> 566

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (392)..(501)

<223> Area matching *Drosophila* EST AA390337.

<400> 306

gaccaggtca ttgaccccaa aggattactt tccgatagtt ttgtcgtgca gtattggtga 60
acttggaat tctttcgaca cttaacctat aaacttgga aggaacgcaa tgtagcaaaa 120
ctactgttct tggtagacagg gggtttaagg tagactaaca aggacaattt tatgacactg 180
aagccctatg gagtaagaat caaagaactg ctgtattttg gtttgtataa atgaataaaa 240
cgttctacgc taattgaaga gcattcgaag aggtttgaat acagcgccat agggtagacca 300
gcttgtggag cattgaagggt atttcttgtt ttaagaatga tcacgggatg gtcacactag 360
aaatacagcc aaacaaaaca actaaaagca ttctgagcgc taacaaatat atatctttcg 420
acttgactca ttgcattcc ggttgaccgt gtcgcgctg cagcatgtct gaaaagccga 480
ctgttctgat tttgggtggc taagttggc ccgcctgcac ctctcatcg tcacctgcc 540

220/586

ccgctcccat ccacacttcc gcctta

566

<210> 307

<211> 440

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(202)

<223> Area matching *Drosophila* EST AA141555 (inverted)

<220>

<221> intron

<222> (203)..(272)

<223> Probable intron in gene represented by EST

AA141555.

<220>

<221> misc_feature

<222> (273)..(440)

<223> Area matching *Drosophila* EST AA141555 (inverted).

<400> 307

tgtagaactt tattttcgat ttagttttgt ttactaataa acttcgtag ctatgacaaa 60
tctacaacgc tggctatattt acgcacgct ctttgcgatt ccctatctct ccgttggtttt 120
gggaacagtg caaacgccac taactaccaa gtatttcctg cacattcagc ttttaccact 180
tttgctcctc gtgatttttg gtgtgagttt ttggatatga atcaatgcag ataacagctc 240
ttattgacta ctattatata ttaccctcag atatattccg tttggactgt tctatataga 300
actctgactt ttaacgattg tcccaggagg cgccaaggag ctgcaggatg aaattcagga 360
ggctcgcaag ggatttgata tccaagggga tttcggtttc gagattagga gacttcaga 420

221/586

acttgtgcat ggtaaattctg

440

<210> 308

<211> 402

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (158)..(252)

<223> Area matching Drosophila EST AA263730.

<400> 308

ggctacacct ggctgcgtta tcgatagttc gggccgatag ttgccgatgg tcagctaata 60
gcagtgaac tccgctagct cacagcaata acacgaggag taatgaagtc gctctagaat 120
ataaataaac aattcattaa ttaaaatagc gacatgggtca actggaggaa gtttatcttg 180
tggttcgccc aggagcatgt cgactttcgc gtgcaggagt ttgattcgct ggtcaaaatg 240
tttggacttc aggtccggcg gcttacagaa cacaccaggg taaagtgttt tagtaccaga 300
atthttgaaaa cgcaagatta acaaattcca ctttcctat aacttttaaa acctgggggg 360
ttaatgatat atcccaactt gggaatttta attaatatgg tt 402

<210> 309

<211> 573

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (324)..(370)

<223> Area matching Drosophila EST AI259832. This EST

222/586

overlaps EST AA990765 and has sequence similarity
to Human ubiquitin conjugating enzyme 12 gene.

<220>

<221> intron

<222> (371)..(447)

<223> Probable intron in gene represented by EST
AI259832.

<220>

<221> misc_feature

<222> (448)..(545)

<223> Area matching Drosophila EST AI259832.

<400> 309

gagcagactg ttatcgggtg caaccatcga ttaattacac atatcgctgg gcagaaacaa 60
ggaaaggata gaaagcactc gaagtgattt ttacatcag ttctattggt aacggtaggc 120
caaagattca gtgaaacaat tgcccttaaa cactgacat ttcaaacaat gcaacctgtc 180
cctcaagcag caaaagcccc ccagagagcc agaaactttc gagcacagcc aaacgcggaa 240
gacgaaacgc cagcgagacg aggacgcaa gatgattaaa ctattcacgc ttaagcagca 300
gaagaaagac ggcgagcaaa agggcagtca gcagaagaaa gcgccgcgcg gccagctgc 360
gcatacagaa aggtagtctt caatccagca cctggtatga tcaactcttg cttattactt 420
atccatcttg ggctggtttc ttccccaga tattaacgaa ctgaacctgc caaacacttg 480
cgccacagac tttcccgatc ccaaggactt gcttaacttc agcttatcat ctgcccgcac 540
gaggctttta cgaaacggcg ctttcgtgtt caa 573

<210> 310

<211> 483

<212> DNA

<213> Drosophila melanogaster

223/586

<220>

<221> misc_feature

<222> (75)..(483)

<223> Area matching Drosophila EST AI514268.

<400> 310

gctgagctat gggcagcagc cgacgagtgc tctgctcggc acggtcggca gtcattctaa 60
tcgacgcctg ctgatgcgga cgcgctcctc ggatcgaatc gaatcgcctt cgaatggctg 120
gtcgttggtt gatcaagtgt cgcgtgcgct aatcattaat taagtgtctt aggaaaaagt 180
cccaattggc tatcgaaacg ggtttccatc taccagtgc tttgcgagct gccttgcctt 240
tgcggcaggc tcatttgtga aaaagaaata tcgttgcggc cagttagatt tcacctgaat 300
acctgcaatc gaacgcaatt atcataccgg caaaatggaa accacaacac ctgtgctcga 360
cctgtgatgc cgcacaactc aactactgtg gcgcctcgaa agcgctctat gcaaatcgaa 420
atcgctgat atggtgtata tcatggttct ggcgttttgg caattcgctg gcctttcatt 480
tgg 483

<210> 311

<211> 435

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1)..(435)

<223> Area matching Drosophila Genomic sequence

AC006562. This EST matches the genomic sequence
20bp 3' to NPS0411. This EST has sequence
similarity to Human molybdenum cofactor
biosynthesis protein gene.

224/586

<400> 311

atcatatgga cgagctgcca gcgcagcttt cgccaaagct tttgttctag tgccagtgtt 60
aggcagcatt tgaaatTTTT tgccggttga ttgattgtat gggggggggg gggggagcca 120
ccaggggggtt gacgcttcag agctttgacc tgcaaaaaaac ctagcagaaa tgaagatgca 180
gtgacagcag ttacttata agtgaatgga gtttaatttc atttatttta gtacagtata 240
caataaatga ttaatatTTg ctatacagat gtaatgcctt gcaaagagtt acaagtgtta 300
taaacattca agcatctaaa ttttgacatt cttagtTTgc ttttaaattt tttttttaa 360
ttttacccaa acttaaacad aaaaatgatc aaatacgaga tataaagacc catattaaat 420
accaggccct tctta 435

<210> 312

<211> 442

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(71)

<223> Area matching *Drosophila* EST AA201987. This EST
has sequence similarity to aspariginase genes.

<220>

<221> intron

<222> (72)..(147)

<223> Probable intron in gene represented by EST
AA201987.

<220>

<221> misc_feature

<222> (148)..(435)

<223> Area matching *Drosophila* EST AA201987.

225/586

<400> 312

agttgggcca acaacaaggc gcgagcataa acagcgatac caacatggcc ggcttcgctcg 60
cggtgcacac ggggtacgtat cttggccatg gcggttccga tccgccgggc agacagccag 120
atgattgatg accgctactt gctctcaggg gctgggaact gcacgcacga aacgaagtac 180
cagcgggtga ttaaggaggc ctgcctgcgc gccacggaga tccttcgcaa cggcggatcc 240
gccgtcgatg cctgcgaggc ggccattgtg cggctggaga actgcggcta caciaacgcc 300
ggctatggct ccaatctctg catggacggc tctgtgcagt gcgatgcggc tataatggga 360
tggtcacaacg cttaactttg gcgcctgcac cgaacgtag tcgggttgaa agaaccat 420
acagttggcg agaccatag cc 442

<210> 313

<211> 408

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (12) .. (408)

<223> Area matching *Drosophila* EST AA540020.

<400> 313

gtttagtggc gagtttgtcg gcgcgaaacg ctggttggtc cttttgtttc gaaagagatc 60
ctattcgaag atccccgatc cttgcgagga tcgtctagtg caatatatag actagttaat 120
ttacttttgg aaaaataagg acaccagcag ggccgccgat ttgtgcccct ttcttgaaag 180
tcgcaaaaca aaaacaacga cgacaacaac aaagcggaga caaagaatcg acaagtagcg 240
ataaacgaaa tcattcccgg ggaaaacctt ggagacgggt gattcactgc caataccact 300
gcccaattgga gactgatcac ggcagccatc cttggcgctc ccaataagcg gagtcaccgg 360
aacgcgtggg aagccatagc cggaatgcag cccgccggag ctctcgaga 408

226/586

<210> 314

<211> 467

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1) .. (38)

<223> Area matching *Drosophila* EST AA201670.

<400> 314

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ctgtggacgg tcgtcaatgc gtgaatatc ttctatgtgt aagtgggtgtg cgtgtatgta 60
gatttctggt taagaaaagc cccaaaaacc aaagcgcccc gcaaaatata tattgagtct 120
tcttggccca acaacaaatc tgccgccgga ctttcgccgg agggcgagtg aaaaattcag 180
tttctctcct ctcgacgatg cactttggag gctgtgtgag tgtgtgtgcg agtgagtgcg 240
tgtgtgtata catatgcaaa tgattggatg tcgaatcctt gcatcatcat catcttcata 300
aacacttggc gaaaaaccgc aggaaaacgc aagcagccga acaaaaaaag agagcctctc 360
aagacaacgg cagcggccaa aagtgaacgc gcaacaaacg ccggccaagc aggcgcggca 420
attatttata aatctaaagc cgttagcccc cctctctctc cactcac 467
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<210> 315

<211> 464

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (15) .. (404)

<223> Area matching *Drosophila* EST AA201957.

<400> 315

227/586

gcggtggcct ttgttgtagt caaattaggc gaaaacgaaa caaacaaaaa tcagaaatat 60
agatcgaatg ctatggcgca cgtaaagcgg tatcggagggt cgtctaagtc ctcggaggaa 120
ggcgacctgg acaacgagga ctacgtgcca tacgtaccgg tgaaggagcg gaagaagcag 180
cacatgataa agctgggcag gatcgtgcaa ctggtttcgg aaacggccca gcccaagtcg 240
tcaagcgaga atgagaatga agacgactcg caggggtgcgc acgatgtcga gacctgggga 300
cgcaagtaca acattagtct gctggaccag cacacagaac tgaagaaaat tgccgaggcc 360
aaaaagttga gtgcccgtcg aaaagcagct gcgagaggag gaaaaggatt atggagaagc 420
atttggtca acagaaggcc cttatggggt tgtggcaaaa gttg 464

<210> 316

<211> 477

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(353)

<223> Area matching *Drosophila* EST AA695344.

<400> 316

gcttagacaa tacaattcaa aatgaatgta ggcaagataa gcgttgtcac cagacttcct 60
gccctccgct cgtgcgcca gtactcgagc gctgcgaaag cggaactgcc ggcttccttg 120
gtcggcgacg tggatgtgga accaacadat cccagacgg tggacagatc cggcctgcaa 180
ccacaacaca aaaatgtgct ccttaacaaa ttgccatacc aggaacctca ctctggatt 240
catttgaccg agaagtacca gagacaggca ttcggccggt atggggccca gagcaatgtg 300
aatcccaaga tttgcttcga ttcccacgga gagaaagaca gcaggcaggt tatgcaacta 360
gaaacctcct gaaaatgctg gagaagaacc gcgcgcagaa ggcagaggag ctggcaagga 420
taaagccccg tgaagaggac attgcgaaga agatggagaa gttgaccaca gtggaag 477

<210> 317

228/586

<211> 451

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1)..(450)

<223> Area matching Drosophila EST AA441018.

<400> 317

ggcgggagct gtacatgaat ttcatttggg aaacaaatth attcttaaaa tggtaagaac 60
acggccgggtg cegtgtgttc cgtcgccaga tgtgaacacc gcaacgagac gcaatcccgg 120
gcgtcccaag aaacagtcca tcggagctga cttaagcaca acgataagca aaccggggcg 180
tccaagaag ctgtccatcg gagctgattt gaccacaata cgtaaaccgg ggcgccccaa 240
gaaactcgga gctgatttga ccacgataat acgaaaaccc gggcgccccg cgaaactatc 300
aaacaaacaa tctttgacag ccctaaacga gccagaagtg tcgcataaga aaatgcgtgg 360
taaaaataag gcgcattaag gtaaaaaacg gtgtcgtatt ccgaaatttc tcgaatgatg 420
cgcttgatg tgggatgccg gcacttttga a 451

<210> 318

<211> 334

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (301)..(334)

<223> Area matching Drosophila EST AA202301 (inverted).

<400> 318

gtatatacta tacgcgagag ggagcaggca cacacaaacg aaaagcctgc ctccaattga 60

229/586

ttagtattag tacttcgaat agtattacta tggttattgt tttcatctag ctgactttca 120
attgtttggt gctgatattt agctagattc cccaggtgcg attactcatt tggcttttgt 180
ttcgagacca ctgtgccaga tttctgggtg agagcgtggt gagtttcgtt tcaactcacc 240
acagaaaactg ttgttgcgcg tcgcgctctc tatttaggcg gctctctccc acacacgggc 300
acactacagt ccaaaaatga acgaatatac caca 334

<210> 319

<211> 393

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (245)..(393)

<223> Area matching *Drosophila* EST AA735819.

<400> 319

cctaaattgc aacaaagaaa attgtatgaa atatacgaag cgaagagcag agcgaaagcg 60
acgatgaaaa agaggctgct gcttgaaaaa taagaagagg tggaggagca agaagaagag 120
cagcagcagc cgtcgcgagt tttttacacg cgtgtgtag tgtgcataca attgtgtatg 180
aaaaagaata aaagctaata taaagtgtca aacgtaatat tgtatatctc cgtgtttctt 240
gcagcgcttg acaacgaaat ttatattaca tagtaaatgc gaaatacaac aaagggttaat 300
catattgctt aatcagagta ctgcggtttc aaacgtcttc gtcttcccca tcttctaaac 360
tggaatgcac ccaacaccaa acaacaaaaa ccc 393

<210> 320

<211> 147

<212> DNA

<213> *Drosophila melanogaster*

230/586

<220>

<221> misc_feature

<222> (1)..(147)

<223> Area matching Drosophila EST AA440886. This EST
overlaps EST AA95395 and has sequence similarity
to C.elegans UMP kinase.

<400> 320

cgctgacgca gcaccaattg cgacattcca aggccagcaa taggttcac accaccacct 60
ccacagcccc accacacaat atcggaatca tgagcgtaga gaagccaaag attgtctttg 120
ttttgggcgg tcccggggcc ggcaagg 147

<210> 321

<211> 602

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (76)..(217)

<223> Area matching Drosophila EST AA8033640. This EST
forms a 859bp contig with ESTs AA803683 and
AA803676 and has sequence similarity to Human
Ribosomal L28 protein.

<400> 321

accagtgttt cggcaagcgc agccaacttc gcgctatgtc ggctgccata ttctttcttc 60
ttgatttcaa cgagaaaggt ggcatttgcg ttgttctcga tttggttaag ttctagcggt 120
ctctcagcgt cccaagcgt ccgcaagtgt agaggtataa tgctgcacc acgtgttgcc 180
gtctatttgg ctgccggccc gctaaacctc ggaggtaa at tgagtttacc cacacgtgca 240
acgcagcggg caaatagtga ataaaatttg aattaattgt agcgaacca taatggactt 300

231/586

aatcaaatag tctatattac taagcgaacc tgcgttgatc aataccaaat ttaatatcgt 360
ttctctttct ttgcatgctg cttttcctac tgctgattta catggatctt tcaataaagg 420
taagaacacg tgtggtctta aaatgcgtga ttaattctgt gatgaatgat tgagcagaag 480
agttcttgaa gactatattc atcacccaga ctgatataca gaaatctcgt gctttattca 540
agaaacataa tctaactgcc gactttcttt tagttccatg ttcacctttg gctgctaatt 600
ca 602

<210> 322

<211> 1073

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (472)..(786)

<223> Area matching Drosophila EST AI257267. This EST
has sequence similarity to Chick glycine cleavage
system h protein.

<220>

<221> intron

<222> (787)..(841)

<223> Probable intron in gene represented by EST
AI257267.

<220>

<221> misc_feature

<222> (842)..(1073)

<223> Area matching Drosophila EST AI257267.

232/586

<400> 322

ttttttttgt agagctgata agggaataaa tcgggccccca gcaacgattt tattgggagt 60
agataagaat accggaggag catcgacgtg gttgtcggaa attaagatga ctgctttaat 120
ctttagtctg atctccaaca tttagaagag ataaaagtca agcacctggt ataaaaaat 180
acattttgta tgtttgattt ctttacattt tttagtattt caaatagaag caaccatttt 240
gacaacttat gtaattgaag tttttttgtg gtgtactatt ttctaattaa atcgaaagtg 300
cgaaagctca aatttaatta taagaaatac agtcctccaa taaactaaat aaatcttgaa 360
gttttcaatc tgcccgccga aatggtgggc agtgcgataa ccggtaatct attatcgcta 420
tcgatatgca tgccttacgc catttttagg cacattttga agaagccgct gtttactcgg 480
gtcaacaaaa gttcacgaat tatattctgg attgtgataa gccgggcaat attcgacttt 540
catcccgatt gccgggcatt aaacgtagcg tgtgtgtttt caaatcggat cacttgtcac 600
cgaaacaccc ccgggaacgg ttggaaaatt catctcgccg gcagttgcct ttgtttttga 660
ctgggaaaat atggtattca taacgaaatt cgcaaggatt gggctgcagg ccgcccgcga 720
gcttagtgtc acgccccttg gcgcggtcca ggctcgcgcc attcacctga caagccttct 780
agccaaaggt aaggcaattg tttatgcaat agccactgaa tctcaaactg taatccccgc 840
cagaacgccg atacacaaac aaacacgagt ggggtggaggt ggtatccggc agcaatgcc 900
tagtaggcat cttcagctac gccaggagg ctctcgggga tgtggtggtc gcccaacttc 960
cagaaccggg cacggaactt aagcaggatg acgaatgtgg ggccctggaa agcgttaaag 1020
cggctacgag gtgtattcac ccgtagtggt caaggtaatt ggaaagaatg ccc 1073

<210> 323

<211> 501

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1) .. (75)

<223> Area matching *Drosophila* EST AA539327.

<400> 323

233/586

ctctgggtcg tcctgcagtt agccggagct gattcgcccg aggaggagca aggcgttcgc 60
tacgcaaacc gctgcgaagc ctgcaaaatc ctggccaccg aattggaagc tcgacttgga 120
gagaccggca agtcgcacga cgtcatcgaa atcggatact ccgttgacga tgtgaagccc 180
aagaagcgca ctgaataccg ggcgcagcga ctgcgactgc tcgagtcctt ggagaacgtg 240
tgcgagcgag tggtgggagt acaatctgca caaggaacgc tctgacagca cgagattcgc 300
caaaggtatg tcccagacct ttcagacgct ccatggccct tgtggacaag gggcgtcaag 360
gtgggatctg ggggaataccc tacgaagctt gtggggacaa gcccccggtg ggaagggtcac 420
cccaaataaa aaccccgatg gcgaaaacct actggaaggg agtacgagga aaccatcagc 480
gactgggtac ttttaagcac c 501

<210> 324

<211> 468

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (419)..(468)

<223> Area matching *Drosophila* EST AI539327.

<400> 324

gtttaaccca tcgccgcca gttaacccat gacttcggcg gcgagtcacg gatggcagaa 60
ctgtgcggaa tcgaaatgcg agttcgaacg cagagtgcgt gaaaatgagt attatgggaa 120
acattgccac aaattgatgc actacgcagt gctaccttta attgaattat taattatgta 180
ccttaatgaa tgcataattg aataataaac tacgtgcaca cgccccca attgttgtgc 240
gcateggcag cggaattgtt cgcggttttt ttttttgggt ttttggcctt ctctcgacca 300
gccactgtta acctttaact tttgtgcacc gaaccgaacc aaaccgaccg gggcgaacca 360
atgtttcgcg gtagtaaaca taagttgggg ctcatatagt aatcacatgg aatattcccc 420
cagccaatta aaccaaaaag ccgcagaagg gggttgcggg gcagcggg 468

234/586

<210> 325

<211> 422

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (92)..(265)

<223> Area matching Drosophila EST AI402854.

<400> 325

gtcgaggcgt aacatttcgt gtctttgaaa tgcatacat cgaagtcacc agtttcagtt 60
ccaagtttca gtagatttcg ggacatcgtg cggatcgaac gtctggcgct gcgttcacgc 120
gactcgtacg ctgcaaggaa tcagttacca gtgaccagta aacagtgatc ggtgaatgtg 180
aacagtgact agtgaatgag acagtgaacg agtaacagcc cgaaaattgt tgcatttacg 240
agaaatcgca tggatattga aaaagggtata gccaaagatg tatggtaaac aaaaaaaaaa 300
aaaaaaaaaa cgcgtgccgt tgttttttag atacacgtgg acagtgggaa tttgtatcta 360
gattgttttg gttgggtttt gcttttagca aagtgtactc acccgtgtgc taaatgcata 420
cg 422

<210> 326

<211> 354

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1)..(222)

<223> Area matching Drosophila EST AA441362. This EST
has sequence similarity to mammalian proteasome
subunit HsN3.

235/586

<220>

<221> intron

<222> (223)..(290)

<223> Probable intron in gene represented by EST

AA441362.

<220>

<221> misc_feature

<222> (291)..(354)

<223> Area matching Drosophila EST AA441362.

<400> 326

tgcccgtcat tctccggcag cgacaaacat ttcaaagtct cgcgttattc cagtctccga 60
ataaattagc atgttgaaca actacaacag cctagcgcag cccatgtggc agaacggacc 120
cgctcccggc gagttctaca acttcacggg cggacagacg ccggtccagc agctaccgcg 180
ggagctgacc acaatgggac cctatggaac caagcacagc acgtaggaac tgcggatatg 240
tttatatgca gatgtaccac ttgtttacac tccttttact attcccgcag tgcttccagc 300
accacgggca ccttccgtgc ttgggcattc gctatgatta aggagtgatg ctgg 354

<210> 327

<211> 227

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1)..(219)

<223> Area matching Drosophila EST AA202487. This EST

has sequence similarity to Yeast YFY6 gene.

236/586

<400> 327

gtcgcattgtt ttatgctcaa gcaattggat gagtacaaaa acgcagagat tttccgcagt 60
cgggacaaca aggctttgaa ggagaagtgc gatataattg tcgacgtggg cggcgtttat 120
gatcatgccca agaaattgta cgatcaccac caaataacct tcaaggagac ttttagttcc 180
gttcgcccag atgtaagcga ggactacaac gttgtcaggt gaattcc 227

<210> 328

<211> 513

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (328)..(455)

<223> Area matching *Drosophila* EST AA263590. This EST
has sequence similarity to human hRNP F.

<400> 328

agctcgactc acttttcttg ttcttgctac ttttcacacg ggtatgacag atctgagtga 60
tggttggaaca cactggcttt tccagggatg gacacgttta taactgtcgc tgtcacggaa 120
cagtgaagata tttaaaatgt ttctgcttca gtatatttca aattcgggta agatcacagt 180
tagtttatca ttttccttat atttaatttc ttctatcttg cccaaaaaaaa gcaaaaaaaaa 240
aatcaaaatc aaaccttggt tcttttttcaa cggtcacat tgatgctggc tactgccagg 300
cggtatTTTTT tgatgattta attgcgggtca cactgcatct tcaacttgac cgccgtgcta 360
tttgattaat ctctctgaaa aataagtcaa attaaccgat taaagttaa aaaaagggcg 420
atattgggaa agttgaaaca gaagcagaat acggttagtt cttctgggtc cgcaccaagg 480
tgtggacatt tagaaaagcg ttatattggg gac 513

<210> 329

<211> 247

237/586

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (50)..(113)

<223> Area matching Drosophila EST AA201496. This EST
has sequence similarity to human oxoglutarate
dehydrogenase.

<400> 329

gtccaggccg tgcgctagca ttaacagtcc caccactaac gcaaaagttt tcggctgtaa 60
aaacgtaaatt atttaaactt taagcaagtt tagtgtaaaa ataatcaaatt catgtgcggt 120
aatttgcaaaa aagtctgcgg ggctatggtc catttagact tagtactgga ttcagcggaa 180
aactcgcatt tcgcgtgctt ttcacttgtc ccacattcga ggtccgcttt tgcattcatgt 240
ggaattc 247

<210> 330

<211> 510

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (281)..(510)

<223> Area matching Drosophila EST AA391430.

<400> 330

ggctggacga gggctgcacg tgaattgatt gatgatgagc agaactgggt cgttgaacta 60
gattatggaa ttaatcgatt tcgtactttg tgtgaaataa acttgtaatg accttttgc 120

238/586

taatatttat taaagattta ttcaattttt tgttttattt ttaaatgcag ttttaaatta 180
ttgtttgttt acatatgtaa cgacagccct ggtgtttctt gtctaattggc aacgctctga 240
aattgcgcag caaccccatc tggccacact gaccatttag ttttttgttt atgttggtt 300
gtcggaaaaa tcggctgttt tccgtgtgtc ccgtctgcca tgaaaagctg ctaaaaagct 360
aaatataaaa atcagcgcag cacacacgtt ccgtcgctg cattggttgc ccattctaata 420
gggaaattat gtgagtgccg agtcaggaaa acgcacgtg ggtggtatat atccttatat 480
ccttaagtat gtaactgcgc cccgttggtt 510

<210> 331

<211> 432

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(50)

<223> Area matching *Drosophila* ESTs AI292722 and
AI534704 (inverted).

<400> 331

ctgtaagggtt agaatgcttc ttcttaacga tttgtcattc gcctttcttt agagatggtc 60
ttacgcgaaa cacaactatc gcaagccaaa acgaaaatgt aggggtgttc aggtgcagat 120
aattgttttag aaatacctta ttgattaaaa ataatgttct tgacaacctt gaaataaatt 180
taagtcaatc aagttactca atgtcgggtat ggtcacaatg cgtacaatta gttaaattag 240
ttagtttggt caatattaaa aaaatccttt ttttaattaa aaaatagctt taatattatg 300
tatcgaaaaa tttaatggaa catagataac actatttata atattatacc gtgttataat 360
tgtgataggc atacacaaat ttataagggg aaaaataagc cagggaaagg cggcccaggg 420
tggccatttc gt 432

<210> 332

<211> 65

239/586

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(65)

<223> Area matching *Drosophila* EST AA439393 (inverted).

<400> 332

aatgagccta acttggattt tcgatcacac gcggcgacgt ttgtttcaac gataattcgg 60
aattc 65

<210> 333

<211> 529

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (299)..(512)

<223> Area matching *Drosophila* ESTs AA820797 and
AA438876 (inverted).

<400> 333

gcgctgtccc aattggaaaa cgaagagagc tcgacttgcg gtaatcgag cgcagctttc 60
acccatacga agacgatgag ctgacgttgt tagaataact tattggaacg tgtccattta 120
gtttgttggt ggcggcgagg gggttagagc aggagagcgt ggtaatcaca tgtatgtcta 180
tgccttcgcc ttactggcac tcacttacac acatacacac gcgcacagct gcaggtggaa 240
aattaaaaaa caagagcgga aagagtgcga tttaaategg ctggcaagcg gcacttacct 300
tgtttctttt tacgtggcca atagtaaag gtggtcggta tcaatattag cgccaagaac 360

240/586

gataacacca aagtagtagg aacgttccgc cgctctcatc atactgaaac ttttgacccg 420
ccatctccga cagcgactat atgtattttg atttttgtgg ttttgctggc actggctttg 480
gctcgttccg ttcggttctt tctctggcgc gttttcctgc cttttcttc 529

<210> 334

<211> 486

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(52)

<223> Area matching *Drosophila* EST AA697891 (inverted).

This EST has sequence similarity to Bovine gamma
COP.

<400> 334

ggtaaaacaa ttgaaatggt tttctggctg cgcttacacg tcactcagcg gtgcccagtt 60
ggttcatctg ttatcgatgt gaaaactcca gttaagtatc gatagctccg atgttggtct 120
tatcttttaa agaccacctt ttttctgcgt tttgtaggca gtatatattc gccgataatg 180
cacattataa ctttcagttt tcaattaact cgacatcgag atctggtagt ttttttttgt 240
tcttaaaatt tcttgttttg ctttcactgg attgaaaagg aactagttga gattcactta 300
ctggttcgat tgtatttatc gatagattat cgattgtgaa tgggcggaaa aatagctaag 360
ctttgaattt gctccacggt gactttataa cgaaattgct aagaaattgt atgaatataa 420
taatggttta aaatttatat acattttcat aatttttacc attaagttgg atccgttttt 480
aatgg 486

<210> 335

<211> 473

<212> DNA

<213> *Drosophila melanogaster*

241/586

<220>

<221> misc_feature

<222> (1)..(31)

<223> Area matching Drosophila EST AA696845 (inverted).

<400> 335

ctccagtctg cccaatgcgc gccgcacacc tcggagccgc aaattataaa cagcactgtc 60
ttcgatttaa cgggctggcc tatcggctct atcgatgact cgatagtgcg agctggagtg 120
tgaccatttc ttggtaaaag caaaatcgtg aagagtaagt gtgcgatact atcgaactgt 180
catatactca accaaataac atctgaaatc tgtttctcac taaaaccgaa atttccatca 240
gggttaggaa aatatagttt acgcacatca agttgcatag gtcaatccta cgtaaaaaag 300
gctcgatata ggtaagggtg gacctcagcc tgaacagggc ctaatgcaaa tacattccga 360
taaatagatg ttatcgataa ccatttggtg tataccagta aatgctttgt tttggttttc 420
attcagaaaa ttgacataca tttcttagtc tgcctaaagt tccttgatt gaa 473

<210> 336 .

<211> 384

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1)..(384)

<223> Area matching Drosophila EST AI259031.

<400> 336

atttaaacca aacaaagggt tagtttagag gggtcttcat cgcgagaaaa aggtactacc 60
atgtcattgc ccacgaccag agccaccacg gccacgacca ctcacgtgt ggtccaggct 120
gtggaaacgt atattcagaa ccagaatttg cttggcgaga tcgctgagct ggacgacatg 180

242/586

ctgtacgatt tgggtgtccat gcacaaagac aacgagctgg ccctgaaacg ggtgcttgca 240
gtgcatccac aacctgttgc agacgaacag caagttaaac gtccgctttg gccaaaagtg 300
tttcacaaac tgggtctcgt ggtgattgcc gacagtcgtg aggattcggc agcccggcgt 360
caaatggtgg ccaatttact ggtc 384

<210> 337

<211> 314

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1) .. (82)

<223> Area matching *Drosophila* EST AA803464. This EST
has sequence similarity to Human hypothetical gene
KIAA0258.

<400> 337

cactggactc tctcgcccggt ggcgtagatg gccgagtcgg caccgacgag ttctgcctta 60
atttcaatca tttatttact tttttatttg gtcgcgactc ccgtagagtg accgtctgca 120
ggaattgttc gataggcccg ccgatagtga tagcagccgt gcgcgtacgc caaccacttt 180
ttaaatgtcc cacctctgat aagtcgtgtt actgaattta aattttcttt ttactctagc 240
agaatcccag gtaggccttg ggtataagct cgaaacattg tcattgctgt cgcgcacgag 300
aacaaccaga attc 314

<210> 338

<211> 489

<212> DNA

<213> *Drosophila melanogaster*

<220>

243/586

<221> misc_feature

<222> (169)..(489)

<223> Area matching Drosophila EST AA539974.

<400> 338

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ccctagcact ctcgcgcact tttggcgctc tcctaggcca attcgctcgc tctttttctc 60
ctctgctctt tgtcgtggtg cgatcatgtg tgggggtccgg ctgcgcgtcg ctaaactctt 120
aaccagtggc tttttaacca gtttaagttt acatttgctg gagcgcagac gtgtccggaa 180
agcgaacgga agacaagtgg aacggaacac ggccgtataa tcagaaatca aacagagtag 240
tggtgtcgtc actttttgca ctctccataa aaatccgtct gccagtgctt gttgcttctt 300
cttgagtgcg ggggttttcat gtatcgccgc cggatttcgg ccttcgagcc cagcacaccc 360
cgcgtgggag tgctaccctc tccgcgggct caatatgcca acccccccg cgacactgcc 420
gccccgaaaa cgccacccaa ctgagcgtag actttggacc ccaatttgcc gaagaaaacg 480
attgcaaca
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489

<210> 339

<211> 524

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1)..(46)

<223> Area matching Drosophila EST AA941993.

<220>

<221> intron

<222> (47)..(431)

<223> Probable intron in gene represented by EST

AA941993.

<220>

<221> misc_feature

<222> (432)..(524)

<223> Area matching Drosophila EST AA941993.

<400> 339

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ctcgagcatt tgtgggacga gctgagcgga gcgcacaaac tgccaagtaa gtggagcatg 60
tggatgaaag gagttcccag aacagtgttg ccaaccaaaa aaaaaaaaaa gttaaaaagt 120
taattttaat agtgtaaata aatatgaatt aaattaaatt tttatgtaaa cagtattagc 180
tttcatgag attaccaaatt tgtgagtgtc tgtgtttggt tgtcttttaa aaactttaaa 240
agcacataaa gaaatatatt tttaatttaa ttaaaaagtt cgtaaaaagt aacaaggtag 300
ctaaattaaa aagtttctta ttcaaatcag atttggcgaa caaagagctc aagttggcaa 360
cactgacaat gactccaagc gcgaacaaaag cgatttctat cgttatccca ctctctctcc 420
cagaagtatc ggttctcaag gccaaatggg aaggggactt cgagacaatt ttccgggtng 480
gagtacaaaa ggataccgcg ggcggataac ggtgatttta tggg 524
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<210> 340

<211> 431

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (43)..(431)

<223> Area matching Drosophila EST AA803074.

<400> 340

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ctcccaacga atcgaaatca gttgttcggt gtgcgtgtgt ggaaaaagtt cgagttcgcc 60
gagagaagcg tgaaaatccg atatcgaaac tacgtttttt tttagtcata ccgattggct 120
atgcaaattt aattgcggat ctcccaaate atcgaaaagc caacaggteg cccctcaacc 180
```

245/586

aaaataaaca caacaatcga gccgcaaag aaacgggcaa aaacagcaaa ggcaactggc 240
gaaccgctta accggtttcg aaatatccat cgtagcacag tttcctcgtc catataatat 300
tccgattgca gtggatcaaa atataaacac acacactcgc atataaattc gcagatatac 360
gttgtttgtg tgagtttctg tttgtggttc gcgtgaaaaa tagttttgac aaatatatac 420
aaagccacac g 431

<210> 341

<211> 589

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(197)

<223> Area matching *Drosophila* EST AA695870. This EST
has sequence similarity to mammalian/yeast signal
peptidase 18KDa subunit.

<220>

<221> intron

<222> (198)..(267)

<223> Probable intron in gene represented by EST
AA695870.

<220>

<221> misc_feature

<222> (268)..(534)

<223> Area matching *Drosophila* EST AA695870.

<400> 341

246/586

actcggccta aacatacgtg tcggaaattt tctgtcttcg tggacgaagc cgagaagttt 60
tgtaaggac cttttcaatt gcatttaaaa aggctatttc ctccacaagc accgcaataa 120
cagccgcagc catgggcgta gccagcatgt tgcagattga cgagatgctg ggcgacttca 180
acagaatgaa caagcgtcag gtgagcagcg ccgcttctcc gggcaatgca cccatatatc 240
atcctgattc gtgccctttc cctcccgcag tcgtgtacc aggtgctgag cttcgccatg 300
atcgtctcct cggcgctgat gatctggaag ggcctgatgg tggtcaccgg cagcgagtcg 360
ccgatcgttg tcgtgctcag tggcagcatg gagccggctt tccaccgcgg cgacctctc 420
ttcctcacta actacaagga ggagccggtg cgcgtcggcg agatcgtcgt cttcaagggtg 480
gagggcaggg acatacccat tgtacaccgc gtcatcaact gcacgaaaag tgagtttctc 540
ggggctacgg atatggaaac caatccagaa agcgtcttta agatgaatg 589

<210> 342

<211> 911

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (775) .. (911)

<223> Area matching *Drosophila* EST AA433251.

<400> 342

agtgagccaa aatgggcgat aatgtgattc ctgctccgct tagccgtatc ccgggcacca 60
gccaggcgaa ggagaagcac agcaaggacc tgaagaccct cacctatccg cagctgctgg 120
agattaagga caggcagtct cactttctgt cgttcaagtg agttttagtt tccacctgtg 180
gagttccctg tgaatttate ttatttaatt ttatctctat ttagaaagcg tttgcaccaa 240
ctgccggaca agggaaagcg tctgcaggag tcgtacgaca aattactggc cgagatcagg 300
aggcgggatg aagtagagga agcgactcga atgttgagcg gtctcaacat tgtcgaaaag 360
ggcaaaattg ctctcaacaa tctggagtgg gaatggcaga aacacggacg agggcgccca 420
tgtggacgac attctggtac agcgatgatg aggtggagat ggatccgttg cggattatag 480
cgcagggaaac aatgcacgag aagaaggcca aggttttgcc tccgccaacg agtctcatta 540

247/586

eggcagatga cctggcggat atcgaggagt ttaagaaacc aaccgactcc ccagattccg 600
ctttggcagg acatagtgac accagttccc ttccagccga aatcgtagaa atcgacgcca 660
gtcaagtggc cgcaaagctg agcagggagc tgcctcccga tcagcatgcc ctctacctca 720
tcgataagac ggaaacaaat gtgaatactc ctagggaaaa gtttatgcca ttccgcacca 780
cgaagtccaa tgtccacaat cccgacaagg agcgcgtgcg caaaaagggc aagcattggg 840
aaataacggc agcaactccg acactcatcc agcacaatag aggcccaagt tggtgccatt 900
ggctgagtcg g 911

<210> 343

<211> 1176

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (718)..(1007)

<223> Area matching *Drosophila* EST AI297203. This EST

forms a 1122bp contig with AI455195 and AA438815.

<400> 343

ctgtggctgt tgccgccatc ggagatctta cactgaaact tgaaggcgga ttctgaatat 60
taattcttct tgaaaaaagg cttttatata tatacataga tctatagctc cctcaaaatc 120
attgcagctc attatcaaac atgctttaat gctgattcgt ctgtataaat atttaattat 180
tgtctaccaa gtcattggaa aattttcacc actatgctta ttccccaaca ctctcggaat 240
attttatatt ttccatgggc tatttgtata atttcttacc ttaatgccaa gaccatttga 300
atatttatac cctgtccttt gctgttttgt tctcttatca atgcccttcg cattgaccgc 360
agttttcaga tttccttgcc tttggcatca ttaatccctt tcaacatggc caaaagccat 420
tcaaaaactga attgttgaga gctgtcactt ggcattttat tgccatcaga tagctgtact 480
cacaacaaaa ttctacgaca acccaaccga caaagccac acgatgatag ttaattaa 540
agttgttggc acactcagaa tatcatgcaa aattagcctg gctaactggc cttatcataa 600

248/586

ttatcagcaa tccccaaaca aaactttaca acatgataat tattaaataa aaagcaaata 660
accactaaca gtagaaccga attaacattt gtgagctcag aaaacaaaag caaaatacag 720
gtgaaacaaa atgcagcagc atccggtttac taattttatac gcaatctcaa ataattttaca 780
aaacaaatgg ttaaccgaaa gaaatatttt aacaagcttt cttgaggcat tacaaaaatt 840
aaaataatat atttcagaca gagcaagata tctattttaaa tattatttta tacaaaatga 900
agcaattgtt aaacaatttg gacaacgcat gcaatcgacc ctatttgtaa ttttaattgat 960
caaaagcgaa tgtgtcttaa agcagtacct ctctactaca cgcttgaggg taattgaatt 1020
tttgcatttt tattttccgg gtcttttaaat atatataata taatatataa ttttcagctg 1080
atttattgag tttgggtttc tttgattaac tatatgtgag ctgtgtggac tgctacttta 1140
agggtaagct aatcattttc atattttata atattc 1176

<210> 344

<211> 106

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(106)

<223> Area matching *Drosophila* EST AA694869 (inverted).

This EST forms a 1632bp contig with ESTs AA735812,
AA568063 and AA695306, and has sequence similarity
to mammalian transketolase genes.

<400> 344

gttcggcatc tccgcacgtc acgtcgtcaa cgccgttaac gagatcctca aggattaggg 60
gaccagtcgt gatctggcta cattcattta ccgcctacag gaattc 106

<210> 345

<211> 143

<212> DNA

249/586

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(99)

<223> Area matching *Drosophila* EST AA392932 (inverted).

<400> 345

accagtccta tctaaatttc tggttttcag atactagaat atgcgtgcaa ttgctggatt 60
tggacagatt ttggacccga aaaaaaacta atgcggatcc agtgtgacca ccgctcgacc 120
gttcaaatat accatgggaa ttc 143

<210> 346

<211> 510

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(260)

<223> Area matching *Drosophila* EST AA391707.

<220>

<221> intron

<222> (261)..(309)

<223> Probable intron in gene represented by EST
AA391707.

<220>

<221> misc_feature

250/586

<222> (310)..(510)

<223> Area matching Drosophila EST AA391707.

<400> 346

gtctggacta cacagcattg ctgtataag gagtcgggac cagaggagta agaaggaagg 60
aatcccgtcc ggtagggact actagcattc gcaagtgacg tccagcaacc ggaggacccc 120
caactgtaga atcagcatca ccataccta cccaacaaac caatgacatc ttgagacctc 180
accagccatg gatcccttcg tgttcttcat agtactggca tcgctttatg gcgttcttta 240
ctttttcgac cgcttcttca aggtgtagta tatccagcca aagttcgtcc agatacttaa 300
tgtaatccct tagagttgca tgcactaccc gtaecatgcc ttcctcaaga acaccgggct 360
tgagtataaa tttcatgagc ctccactggc acaacgagtg cctttaacag gaccctctac 420
gctgggggat ctggccggta acagctgcac ccggagagta atgatcacca gtttatgtta 480
ggagtccctg gtcacctttt ctctgttccc 510

<210> 347

<211> 528

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_difference

<222> (45)..(141)

<223> Area matching Drosophila EST AI294564.

<220>

<221> intron

<222> (142)..(444)

<223> Probable intron in gene represented by EST

AI294564.

<220>

251/586

<221> misc_feature

<222> (445)..(528)

<223> Area matching Drosophila EST AI294564.

<400> 347

atctgttcta ttattgtttt ctttttgtaa agagtttgat tgaatcggat tggatagaag 60
cctggtgaaa agacaaagaa ccagcgtaaa gatgcctcgc cttgtcaatg gccgcgaagc 120
cgcgcccacg tactcgaatc tggtaagttg aacttcaatg tgtggagcca gcgactcctt 180
tcacccaaaac aaaggattgt atgcatttgt tgcattgtttg ttatgctggt tgcgcaacaa 240
atgtgcattt ttacaaaagt cagaaagatt tgtgcttata tttttgtata aaacgcctta 300
agtacatata ggtgtgccag tggaaatata agaatctact ccataacgcc cacttgca 360
atttttgcgt tgtgtgcact tatttttcgt ccacaatctg aacacctgtc gctccgtgag 420
ttaaaatttc cttttctatc cacagggttg cttcatattc attttcaatc taatcgttgg 480
aaccggagcg ctgacgctac ccggagtctt tgccagggca ggatggat 528

<210> 348

<211> 551

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (345)..(460)

<223> Area matching Drosophila Karyophilin alpha 3 gene,

Accession number AF152928.

<400> 348

gacagaagtt tcaataatag cgatgacact cgtaatggta tctacagttc gcagggctca 60
aagatatcga tactttgcta gggttgtgta atagtaccgt cagacaagc gcctgcttga 120
aaaaacctaa ataatatgaa ttgctataat gctttttaag acaaatgaaa tatttcctaa 180

252/586

ataatgttca actggttcat aagcttaca ctccaactga gtaaacttaa aatttctaaa 240
tttaaaaaat aagtcgacat aaattcagat ctgacgattg gtgcttcaat cgaccctgcc 300
tattaagtgg ggcagtcctcg aattgccaac cgcagccaac ttcctcacgt tcgttgtcac 360
tgattgcaat tttaataaaa aggaaaggaa ttttatcact tttaaaaaga cgtagaaagg 420
tgtgtgtggt cgtgggagaa acccgattta cttgctaaaa ccgtaagtat cctctaccgc 480
aggaccaaga gaaacctttt tcggcccggt gcattgctat tttcatggat tttttcgc 540
ttcctttttt c 551

<210> 349

<211> 177

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(177)

<223> Area matching *Drosophila* EST AA540743. This EST
forms a 1129bp contig with ESTs AI064582, AI519458
and AA568024.

<400> 349

tgcgtaatta acgctaatta ggcagaggag acaatttagt tttattcgat cagcaataaa 60
gtgcggttgc acacgtcacc gaacatttgt tgcccaacac cgcactgcga acttcagctg 120
caagtggagt ggaaaaactg ctgataaccg atgaaccag agacaactaa ctagccc 177

<210> 350

<211> 328

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(325)

<223> Area matching Drosophila EST AA539054.

<400> 350

gcccgcgcta tccgagtgcg ccccatgatg cgtggcatcg cctcgtcgtc agtgtggaac 60
cggaatcgtc ccgttcagag ttccctgatg caatactgcc gggatcggtc gttgcgcctc 120
cagcggctcc acggagccaa ttgatgggtg cagcgcttct acagccgcaa gcgggatgat 180
tccaacgggg atattattat gggacccgat cttatgtccg atcaagatac ccattcttcg 240
gcaactgtgg cggtgcccgg accgtgtggc cacatgttcc gttgttggcc atgcgcaaag 300
aatcctctct tccccgctt tattgaaa 328

<210> 351

<211> 531

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1)..(73)

<223> Area matching Drosophila EST AI062939.

<400> 351

acccgagcca accgaaagcg ccacaaagag ctctttttctc tcccggctcg gttgactaaa 60
aaaaaattaa aaggtgaaag cgcgtctcgt gtcgtctttt ttcacattat tatttttttt 120
cttaatctcg tgaatgctac ctactactgc agcatctcat ggaaaaccat tcttaagctt 180
tttttttttg gttttttgga atgcaaattg cgcttatata ataggccatc gcgagccctg 240
tgtgtctgtg tgtgcgagtg agtgcaagca tgtgtgtgtg tgtgtgtttg tgtttcaaga 300
atcgaacttt atgctttggt tacatttccc ttccacaatg accaaatgtg ttagagagaac 360
ataatttgtt taaaggtttc cgttttgtcg caccaacgag tcgcattgcc acccctgtga 420

gaaggggctc catagccccc aacacccatt cccacccct gtctcctgc tgctgcgcc 480
ttaaattttt caattgaaat atgactgcac acaggccagc cccaaacgca g 531

<210> 352

<211> 1109

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (927)..(1070)

<223> Area matching *Drosophila* EST AI109224.

<400> 352

gtcctgccct tcgacggagc aactccgatg gcctcagcac cgactacgcc cactcccttc 60
ccaagaagga cgatcagaac gccctctcca gactgggtgca gaatactgcg atgtacgtag 120
ttgatagtgt atagggtcca catttggcac tatcatatac aattccattg attggaatgc 180
tagcatttta cagcgattgc tatactatac tatactatag tagtatacct acgtagttat 240
agcgatggca ggatctagta tgtagtatgg ttatacccaa gcatttatcg ggatgttcaa 300
tgcaacaaag caacacagcc ctaattatcg cttatctata ttatatttgt attcgcttat 360
acgctacttt gctctccaga aacatgataa acgttggagc catggactgt cacagcctgg 420
agcaccagga gtacgccgat agaataagat tgtactcgca gcggttgcac caacagtggg 480
aacaacggcc agcacgccag tatcgcccaa aaaggtttgc aatatagcta gattgaaagg 540
gtgaatgatg actaacaatt aatgaacaa caggtctcct taaagatgta ccaagccatc 600
agttctatct gtctaagcca acctatccag atgacactgc tcaagtgagt ttacttttc 660
gcaaattgct tgttgcttac caatttcgta tgtttttaga tgaagctctt caccgagaag 720
gcacacatca gtgtctcgca catacagatc gaccacaaag aggccgtggg tgttcccttc 780
cggattccct gattatcgta tcttaagtga aataaagtga taaatttata taaaatcaaa 840
atctatattg gtactaagta gcccttgaat aaccaggtaa tcgacttatt ttcattaagt 900
gtacagaagc aaataaatac atactatatt cttaacacgg caagacattt tttttattta 960
ggaaggcaca cacacacaca tatagctaaa atccaaaatg tcgttcgatc ttaaccataa 1020

atTTTgggtc tacacgcgca aggaaattgg tcaattaatc aagaagcaga ccgctgaaga 1080
agatgaccgc agaggaaaag catatcgat 1109

<210> 353

<211> 382

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (43)..(146)

<223> Area matching *Drosophila* EST AA696728. This EST
has some sequence similarity to isopentyl
pyrophosphate isomerase genes.

<400> 353

ggtaatcctt ttattacaag gtccataatc ctctgtatcc ttagataacc ttcccaaaca 60
cctacaccaa cgcgtgctgc agccatccgc tttacgagat cgaacaggaa cgtcaggagc 120
gcaacgcaca gggcatccgt gtggccgctc aacgacgtct caactacgaa ctgggcattc 180
ccaaagagga actgcagcca caggactttc gctacctgac ccgcatccac tacgcagaca 240
cgggcgacgg cgtgtggggc gagcacgaga tagactacat cctgttcctg caaaaagacg 300
tgacgctgcg tccaaatagc aacgaggtct gtgaggagcg ctacttgcgc cgcgataatg 360
attgacgagg cgtgggccga ag 382

<210> 354

<211> 533

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (59) .. (533)

<223> Area matching Drosophila EST AI518328.

<400> 354

ccctggcctg agttttcctt cattttcacg cgaagttcac actatttcgc gccaaatggc 60
aaataagcat aatttgtgca aaaaaagaag tttggatttg agcgaggaat caacaagcga 120
aagccatgcc aagcgtcagt gcaccgaaaa cctcttttgg ccggagggcg aagacgacga 180
cagcttcttt tccaacgcgc atctggagga tttgctggac ggacgaaagg aggagctctt 240
tggcacgcaa gcaaccacaa gtaccaacaa gatgacgcaa agtgggtcgg atgatggact 300
gggactcttt gcggacacat cctttccaag tgcacaggag tgttccaccc aacagtgcct 360
ctaaaccgga tgaagccagt gcaccaactg ataaacatca aatcgacctg gcggacgagg 420
aaaacgccga caagctgttt aagaaaatca acctcaacga tctgagcatt gccgaaatgg 480
aggatatttt tcatggcgcc gatgatttta gtgatcccat gggtcaaaac aca 533

<210> 355

<211> 457

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (43) .. (432)

<223> Area matching Drosophila EST AA263622.

<400> 355

ggccaatctg acgccagttt atagaaatct tttaacgttt cggtcgtaaa tcggctcgaa 60
tgctagtaga aaattagtga ccagcgcaaa acgggtcgaa aggcaatgcg gcatcaaaaa 120
gttaactaaa ttaatcacia ttaccgtgcg aatcagaca gtgcagcgcc acagcgactt 180
taattcagaa aatttghtaac ctggagcgca ttactaagaa ggactgttgc ccataggaat 240
ttgacagact ctggcgactg tcaaagtgtg atgtaacatt ttttaagtgc gcgatgacta 300

ggaaaaattg tgaaaactgg ctaccagcga taaattgtcc aaatatttcg tgggcatgga 360
cgaagaggag gaggaggagg ttaccggatc taaagctgca attgttccac aattacagta 420
cgcgagcaca ttgtaagtgt ttttctggat tgaattc 457

<210> 356

<211> 489

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(164)

<223> Area matching *Drosophila* EST AA539661. This EST
has sequence similarity to Human proton ATPase
like gene.

<400> 356

gcctgggtcaa tctgttctgc ggcattgctg tgggcattgt gggttcgggt gccgccctct 60
cagacgccgc caatgccgcc ctgttcgtca agatccttat tgtggagatc ttcggttcgg 120
ccatcggtct gttcggcctc atcgtgggca tctacatgac ctccaagtcc aagatgggcg 180
acaaggagta ggcgcggtcg ccagccatcc agtgtgagta tgaatcattg cagagacagc 240
caagggtcaag agaatagcac tcgcgacgga gcaactgaag ctttatcact tgtaggctgc 300
attgcgcgat tcgcgtctaa gagaatgttg taacgcactt gttcttgctg ttgataaact 360
cagtaataag ttaatttaac cgcataaaca tagaggagct accagctctt ctctgagatg 420
cattttatga aacctaaagc aatacactcc tgattgccat ctttcggttt tgccaagtgc 480
tatagctcg 489

<210> 357

<211> 1043

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(152)

<223> Area matching *Drosophila* EST AI388964.

<220>

<221> intron

<222> (153)..(213)

<223> Probable intronin gene represented by EST
AI388964.

<220>

<221> misc_feature

<222> (214)..(579)

<223> Area matching *Drosophila* EST AI388964.

<400> 357

ccccatgtca agttcagatg acgatgggtt tgaccaggat gagaacaaac tgttgcaggg 60
cctggagaag tccttgaagt ccctggagct gcagaagaat gaggagtaca tcgaatgccc 120
cccatctgag cgtaaatgcc ccccatctga gggtaaatac caccttatgg ttaagcagcc 180
ataatattgg tactatcaag ctttttgatt tcagtggggg agtacgtgat gcaacataca 240
cggttctccc tgaccgagtt aacaaatgcc ttaaaaatgc cagccatcga catgtttctta 300
tactttttgt ccgataagcg agatctcttc gagaatcaaa gtgttggcca ctgacaatgt 360
gaaacgagtt ggctgttcg tggatgtcct gtggtcgctc tgtgaactcg aattgggcgg 420
attcgatgaa gtctttctgt ccgcattcag ccggcagacg gcgcttctgg acaagatcaa 480
gaatcttttg caggccaaaag ccgctgtggc aaaatgcgat gcggagtcgg cactgatatt 540
aagccatagt aagtggatgc ttctacgagc ccataagcat ggctctctta gtcaccaggg 600
ctacgaattg gtggaacttt ataagaaatt ggcaccttcc tttaaaagcg acatgattga 660
tggtcttgaa gcattcaccg gtaacttttc acataacgtc aagggcctaa tttatccaac 720

gctggagacg ttactgggca aagatgcaac taaggctccc aatgaagaag aggatgaggg 780
cttggtgtcc gacaaagtag tcaaatatgt gaatgcactg cgaaatttac taagggaaga 840
tttttttagca ccactagttg agttttgtgca acagctgcgc agcggaacgg atgtcgatga 900
gttgaagcaa cagggccttc tgtggtccga tgtgcatctg actttaaatc cacagtttgc 960
caacgctcag cgtcatagcc ttgttttttt gaaggttcaa tttactaaag aatccaagaa 1020
tgcctataag cttggctgaa ttc 1043

<210> 358

<211> 536

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (365)..(462)

<223> Area matching *Drosophila* ESTs AA438987 and

AA264877. These ESTs have sequence similarity to

Human FXR1 gene.

<400> 358

atcggagtga acgaacgaac gaagcatttc ggcggcgaga gagagagaaa aagagagcga 60
gagcgcacac gcttggtggt ggtcatgtgt gtgtgaggcg gcgggctcac acacacaaag 120
ggagagagac aaagaagaag aggaagcact gcgctgctgc gctgccggca aagccgacgt 180
cgctgccggc ttgcgcgcca gctgcattta gtgttttagct aggaattatc tggcccccaa 240
aataacttca aaattttctt caactatttt ttttattagt gtgtcaatat atagtctccc 300
tctccagata caaaaattca aaaataccaa aaacaaaacc attccatatt atcattgatt 360
acaggcaaca tttgaagcag cagccgccaa gcaaaagact gatttgagta caaggaacta 420
gaagcaggaa cgcgaggttt ctgccactgc aactgaatt gtgagcatac ccaccatac 480
ctagctatat ctatagccct aatatctcca ttcttcccc tcaggagccc cagata 536

<210> 359

<211> 257

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (6)..(257)

<223> Area matching *Drosophila* EST AA392117.

<400> 359

acctgagcaa gggtttatgc cgatgatctg cgcataaacc agcagcagct tatggacgag 60
atttcggccc tcttgcagaa cacagcgaag ccgagcgccg ccaacgcact gcagctgaat 120
caggagctcc agcgccgggt catgcaagtc cggaccacaaa ttctggccat gttacaagta 180
gtaagggccc gcttctctcg gaacgaggac atcctgggtgc gccggctgcg acctagtctc 240
catttcggcc cgaattc 257

<210> 360

<211> 591

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (45)..(120)

<223> Area matching *Drosophila* EST AA821194. This EST
forms a 987bp contig with EST AA736168 and has
sequence similarity to Human 40s ribosomal protein
s29.

<220>

<221> intron

<222> (121)..(544)

<223> Probable intron in gene represented by EST

AA821194.

<220>

<221> misc_feature

<222> (545)..(591)

<223> Area matching Drosophila EST AA821194.

<400> 360

ggtcggtg ccatcgctag ttccttttct tttcgaattt ctcgtggaaa acgccaacat 60
gggtttcgct actctctggt actcgcatcc ccgcaaatat ggccaaggct cccgatgctg 120
gtaagaattg tggtgcccgt tgtttttcgc acgttttggt gtacaatttg tttaaagtct 180
tgtcccgtaa ccccgatatt tgcacgattt ttgcttggtt gtagaaagtg gggttatacc 240
cgaccgcgtt tttttttaac gcatggcgtc taccaatttg tatttgcttg tattgtcaat 300
tgtttcaatg ttccaaaggc ttttgcccc gggtgagtag ggaaatacgt gtttagcatc 360
tagaacagtt tccttaatta aggggtggcca aagtaagagc tgcgcgaggc aaaacgagcc 420
atttccgaat ggatttggtt cagccaagtg cagcgacagc tttgctttta atgaaactgt 480
tccatgctac ggagattctt tgatggaacc gatctaacta tgatatacca tctcattttc 540
agcccggtgc tgctctaacc gcacgggtctg atccgcaggt atggcttaac a 591

<210> 361

<211> 555

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (12)..(469)

<223> Area matching Drosophila EST AA539752.

<400> 361

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gttcggacgt gctacgcggt ctctctgtg tgtgtgaggt agtgtgcgtg agcggagcgg 60
cgaaaaagca caattgaaat taaatcgagt cgttatctgt ggattcggcg gatacaatac 120
aatatcgatc cgttatctat ttacaaacaa atcgacgtgg attaataaaa tgccgcacac 180
gaatgcttaa agcggcctat ctgtgtgtgt gtacgtgtgt gtctatgtct ttgtgtgttt 240
cactctctct ttgaaatagt aaacaaattg cgtataaagt ttacagcaaa gtaaaagaca 300
aacaaaaata tttatataaa acaaagtata ttctgcagtg cgtgtaaaat atttcgaaaa 360
gtagccgcaa aaaggcagcg gcgtcgacgt cagcagagcg cgggctgcaa gtgtgttggg 420
gaggcgtata tacatacata ccacgcataa agtgcataa taaggggggt acataagcag 480
tgtaattaat taagtgaaat ccaaatagtt ttgtgcatgc gaaattggaa aaatcgagag 540
gagttccgca caaca
```

555

<210> 362

<211> 526

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1)..(382)

<223> Area matching Drosophila EST AA803203.

<220>

<221> intron

<222> (383)..(455)

<223> Probable intron in gene represented by EST

AA803203.

<220>

<221> misc_feature

<222> (456)..(484)

<223> Area matching Drosophila EST AA803203.

<400> 362

ctcccgacc gtactactcg accaacgtgc ttgtgtgcag aatttcctcg gctaaataaa 60
acaaaaaatt ggcaaagcgc cgtgtcagat ctagccgtcg attgcacaat tccggagcag 120
gacgtcgtcg ctggagccac cgaagcggag tcaccatcag aagatcacca gcaccaggag 180
aaccagtggt acagtcctcc tctttttctt ggctgccgag gcgtcgcgtg tgcgtatctt 240
tcagcgggtga ataaccacg gctttttggt ttcggccaga ggaggagcgt gttgcagtcg 300
caaacgggaa gatgggttaa gctaaaaagg gcaagaaaga gatactgacc aaggtcgaag 360
gcggttcctc ggtggacgaa atgtgagtct tgtgcaagtt catgcccacc tgccaacttg 420
gcaaactttc tatcgcaaat tattcaatct tacagctccg atgtggacag cgaccagttg 480
agcctcaaca accagcagaa tcatgccct gaagggcaat caagct 526

<210> 363

<211> 401

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (105)..(154)

<223> Area matching Drosophila ESTs AA802887 and

AA820871. These ESTs have sequence similarity to

C. elegans protein B0336.11.

<400> 363

cgccagacgg gaagcggcag caacaacagc tggaagaagc tgatcgagtg tgagcgagac 60
agcagtcacg gacgagcgtt ttgggtgtgc tttcaattca gtagtatttt cacttttgcg 120

cgaactagtc acaaaaacct gcaaagcaat cgcaatttac gtttgtttct gtcctcaact 180
tgccgtaatc gtcattggaaa tgtgcaatct gtaattgtta ttaacaaagg agcaaacata 240
agtggaaact gcattgttat cgtaccaatt gatattcact actcaaagtt taagcaaaaa 300
caacaaaatg cccagggtat gtgtgtgtga gtgtgttcgt gtagaatgtt ttttggtttt 360
catgctcatt gaatttcgct taagaaatcc tgcgtcattt a 401

<210> 364

<211> 177

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (22) .. (177)

<223> Area matching *Drosophila* EST AA817394. This EST
has sequence similarity to Dead box DNA helicase
genes.

<400> 364

ggccaccccc agtaagcgga cgcattttt ttctgtgaaa gtcagaaaaa ttagccgaaa 60
aagactgtaa atatttatta atatcagccg aaaccgcacg cgaacaaatc gtgaacatgg 120
cgcgcaagaa tgcccaggcg gaggacctct ccaacgtgga gtttgagacg agcgagg 177

<210> 365

<211> 546

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1) .. (77)

<223> Area matching Drosophila EST AI064638 (inverted).

<400> 365

```
ctccccggttc ttctgatacct gatccctccc ccaaactaat aattttaagt gattttgttt 60
ttatcaatga gtttctacgc ccatcaaagg actgccact cgtttgata acagatgtct 120
ttaggttgct tatcggtttc tggtatcgat gattttatat aaaaataata caaataaaga 180
caaataatag aggtaaagat aaattttaaa ttctgaggaa gccatatatt tattgttggt 240
cctttaataa gcaggaattt tcaagtattg attcagaaaa acgcttataa ctggaaacaa 300
tctacaactt aatgggagta tacaatttaa tgattagtgc ctttcgatga tgtggattca 360
aagttgctca accaaagtta aaaatctaaa atcgaaaatt taaaaactta tcgagtgaga 420
ggaccaatcg actactcgac ttagcaaaca tcgaaatata gcagggtggg acctcacatc 480
gccatctggt ccacgctag ttcatctttg gttcatcgcg ttcgggtcag tgcacggaac 540
gatttt
```

546

<210> 366

<211> 547

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1)..(37)

<223> Area matching Drosophila ESTs AA736157 and
AA140746.

<400> 366

```
acatcaccat aagcattttg ttgtgtgacc ggagtttagt gttgccaaat accaaagcat 60
gaccgcctac cagaatgttt gcactacgat agataaaata ctaaaagtta caaaaaaatg 120
atatatatct ttgtttaatt tttttgtata ttgtttttt tttttgtatt atattttgca 180
tatttgtaca tttctctatt ttataacggt tactccgtaa atttacttat atgtaaatta 240
```

tatttataca ctaaactttc tttaagacaa tttcctattg ttcattcttat tgcgatatat 300
ggatttatgt gccagtggat gtctcagtag tcaaataact gatttcttgc attggtggta 360
acagaaatat catcaagtca gcctgtatat aaaagaacat atgtagatga aaattttaa 420
tgattgtatt ttaaagacaa attattttcc ctgattttgt agagtgggat tttttattta 480
actatgcgtt taagtgggaa aagggtata aacaaaacga gttgatagca gaggacctg 540
tgagttt 547

<210> 367

<211> 559

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (7) .. (369)

<223> Area matching *Drosophila* EST AA820427.

<400> 367

atgtaaacga aatgcgagtt ttaggaaagt gcactgtttt ggtcaggcaa acccgagct 60
tatccacgcc atctgggcgc cgcagagtgg tggtcacggg aagtggcgca gtcactccgc 120
tgggcaacaa tggaccggat tcttggcgac gcactcctggc cggcgagtcg gcaatttctc 180
ggctgagtgc ggagttaaag ggcttgcct gccaggttgc ggctcaaate cggagggaaa 240
acctacagct ggatcaacac ctgaccaagt cggacattaa gctgatgagc cccgccacgc 300
agcttgccgt attggcggt gaggaggcct tgtcaaccgg aaagctgtgc cccaagcaat 360
tgagcgagga ggagcttgag cggttcggag tgtgcgtggg catgggcatg ttcgaccttg 420
cagaggtcta tggcgcttg aaccagctgc aacgagggtta caacagagta agccctttt 480
tcgtgccag gctgctgccc atatggcggt gtggtcacat aacatgcgac atggctttaa 540
gaggacctac cacttcggt 559

<210> 368

<211> 533

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(533)

<223> Area matching *Drosophila* EST AA391736. This EST
forms a 1692bp contig with ESTs AA202259 and
AA820861.

<400> 368

ctaccgactg tctgtgtgta agtgggcgcg aacgtacggt cgaaaaggaa gtgaaaatag 60
tgcaaaaagg ccaagtaata ataataataa taaaataggc aaaaagacag gccccaaaag 120
agaccgacca gaccagtttc aaaaagcgcc tatttccagg ctctttgtgt tatgtgtagt 180
ggtaagtgtg tgagcggcaa caacaacagc agcagaagca acaaaaacaa ctagcagcga 240
ccacatacgg tggaaaaggc cttttttcaa ggagcgaaag gcaatgcgcg aacgagcaat 300
aagaataata aattacactt tgctataata agaataaatt tatacatata tacacacaag 360
cgaggagagg ccacacacac atgtgttttt cctcgttgag agtgtgtgga aaattgtaat 420
actaatatga accgcagaag cagcagcaca acgagaacca cgagagaaaa tttcgaaata 480
tcgcattgtg cattttaagc tttaaataaa ttataacgta cagtattaca aat 533

<210> 369

<211> 612

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (158)..(470)

<223> Area matching *Drosophila* EST AA567184.

<400> 369

gctccgggca agaagtccat taccaagtgc gccgtgaatc agcgccaggt ggtcatcacc 60
ttgtcgggca gggagttggg ctacttcgaa atggatccgg taagtaattc tactactata 120
ttacactcaa cttttgactt cttgctctga tgacaaaaac acgaaaagaa caatcatggt 180
gagacactat gtgtcctgca gtgctgagct tcaaaatcaa ccaagagcct taccctcggt 240
tacttaactt cacaactaat gaatacattt tatgcttgca gactggggag ctgaacgagt 300
acacggaacg ttccgagatg cctgctgaga ttatgtgcat ggccttggga actgttccgg 360
agggcgagca gagatcctgg ttcttggccg tcggcctggc ggataatata gtgcgcatct 420
tatcgctgga tcccaacaac tgtctcactc cctgctccat gcaagccctg ccttcgccag 480
ccgaatccct ttgctgggtc gaaatgggtc acacggagag cagactcag ggaggtttgg 540
atgacgatgc ttccgctcag cgagtgggca acaataaggg aaccatttac ctaacattgc 600
ttgacaacgg tg 612

<210> 370

<211> 462

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(122)

<223> Area matching *Drosophila* EST AA735277. This EST
forms a 1176bp contig with EST AA697907.

<400> 370

gccccaaactg ttggcattat tacaactttt attcgcctaa aaggcgattg accggggagga 60
gtgtttgatt tgcgcggcat tcaccaattc gtcagcactt cagagaaaga aggagcaatt 120
aagtaagcat aaattctgaa ctactgtaca gtcgccggat ttaagacaag ggaagcgaaa 180
agagggcaac acttgaagca catggcagaa acacagaata aattgggttt gtctgaaaat 240
agcatgtatg ttatgtattc aaaaaacatt cgaaatggga agtatagaat taattgacat 300

tgtaaaaaaa aaaaaacttg gatgtgccat gggtgtaaga tgagaaccac cgaaagcaga 360
cgaaaaacaa aaagcaggag aaaaaacggc tttagcgaac cataatgccc gaagtgacca 420
ttttaaccga aaccttttca taaaaccgaa attcgacagt ca 462

<210> 371

<211> 616

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (514) .. (616)

<223> Area matching *Drosophila* COP 9 complex homolog
subunit 1-2 gene. Accession number AF129080.

<400> 371

gcgtgggtgcg cttcttcttc tgaaattagg gatgggaaaa atatatcaat ttatcgatat 60
attaaaataa atgtaaatat ttatatcgtg atagtttttc tatgatatat caaatatcgc 120
tctttctgta aaatatTTTta ttggacacat gtggattcat aaaaaactga aaactaagtt 180
attattctta aaggatcact aaattattat atttatgatg aaatatctga tgataaatga 240
taatataTTa taaaatgtca agaataattt gtttgggtac tttatcattt tgataatttt 300
tttaaatgaa aagtgtctga taacgacctg tagtcgcgga ttataaaagt atttgatata 360
ggaacttagc ctaaaaccaa ctatctttgt taaatatTTT aaaactgata tcagtgttat 420
tttttgttat attatttggt ggaaaagtgg aaaatgggtc tctctacag ttgtcatcta 480
tcgacaaagc cgttgtcaca ttgccatctc tagattatcg gtgtaaaata atttgcgaaT 540
cggaaaaatt aattgacgaa taaacaaaaa cgtagcttaa atttttcatt ttccctggac 600
tttcgttgca aataga 616

<210> 372

<211> 322

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (140)..(189)

<223> Area matching *Drosophila* EST AA202581.

<400> 372

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attcagacaa acacggcaat gcacttttgg tggtatcgat aagcagtgtt ggacagcacc 60
ctgcagctgc ctgcattggt atgcgcaatt atcgatatat acaccctggg gccatcattc 120
tcgttaagcc atctctagtt cgccactgaa ctcgtaaaaa agtgtaaaat ttgtttacat 180
tgaaaaaagg taaaatattg ttcttgaggg ctacctacgg tgctccctgg ctccatagatg 240
ggtcagccaa gacaaagggc cgtgtgcatg tgtggcgcgt agccctttat aagtgcgggg 300
ggtggcggga acagctcagg gc                                     322
```

<210> 373

<211> 607

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (41)..(377)

<223> Area matching *Drosophila* EST AA390775.

<400> 373

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cactgagcca aacaaaatcc gaaattattc gcaacatgga cgagtcggag ctgctattca 60
atctgtttta tattctgttg tgcattggtga tcatctaccc gccagaggag ttccaacgcc 120
tggtgattcac cattgaacag ttgttcgctc gggttcctggg agaagagtac ctggactttg 180
taggctacca ccagcgccgt acttcgctga atctcttcgt gcactcctgt ctgcccttct 240
```

cctactttct tattcatagg ctcaagttct cegtcttcgc cacgcaggag cccttgagg 300
acttcgacct ggacccgat ttcccatgc cccaggaagc ggtagcggtt aaaacgcttt 360
acgtggaaaa ccgcccagcg gttcagtgtg ttggccgttc tggcgatgcc cgtctgatct 420
tcaactgggc accaggaaaa tgggcgtcgg caccgccatc agcaaggcgc tcttcaagta 480
ctccatcacg ccgggcagct acagtgccgt ggctagcgaa attggtatta gagttccggc 540
aaccggaaat ataccagaag aactaattca ttagcttcgg tgattgccac gcagactggg 600
atataaa 607

<210> 374

<211> 488

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (169)..(488)

<223> Area matching *Drosophila* EST AA539898.

<400> 374

cgggtgaagtg agcggttgtg gaacgtgagt ggatgctaag agcaagctct cacatacgcg 60
gacatagctc gcacacacac acgcacagac cgcttttttg cgccgccgaa acgaacactt 120
ttacgaaggc gacggcgaat cagtttcagt tgtcagttcg catccaacta gaaagcagtt 180
aacgagtagt ctgtgttttt tcgcttgagg ttaaaagcca cgaggtcggt catcgttcat 240
cgttttcctt ttcaacttca agcaaagcaa atataaacca atgcaaaaaa cgcagtgatc 300
ttttgaggcc caaatcgttt ggggccgaac accgttgatt ctaaaacgca aatgtagaaa 360
caaatcaaga aaagtggaaa ataaatatgt ttcgctttca aaacatgtgg aatgtgcccc 420
aactcaaaac tgaaaacgta gaaggaaccg cgttcgtttt ttacatacga caatcgatt 480
aaaataag 488

<210> 375

<211> 597

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(127)

<223> Area matching *Drosophila* EST AA390453.

<400> 375

gatgtgtgca taaaaatcaa gcgctgcagc agccaaaaag cgagaagaga gcgcgaggca 60
gagagcgtgc aaagcgggtca gcgagagagc ggggtggctgc tgcaccttca taactgttgt 120
tgcaaagggtg agtgcgtgcc gaatattgtt ttggttcag aattgtttat ttaagtgtac 180
tctcaaccag gccaacacac tcacaaccac acgcccgcac gtacctgcga cccacgaacg 240
tgtgtgtgcg tgtgtgttgg cctgcctgct ttttttttat gcggaaaaaa cattgatcca 300
aactttttcg ggcctcaaga acctcatttt tggctcgccc cacaaggcat taatatctgt 360
tgtgaaccga aatgggttta aataaaagct ggtcagcaga taaaagtga tccaatatat 420
atgtacgtac atatgtatgt ctgtagggag cctttgttca tttcagctac aaacatctga 480
gaaagaataa agtattaaga aatattttac ttggttaatt acttaaacag aaccagtttg 540
gcctctgtgg catatcactt gccagttgaa tccgcggaat taattcttga agacaaa 597

<210> 376

<211> 328

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(321)

<223> Area matching *Drosophila* EST AA568061 (inverted).

This EST forms 1356bp contig with ESTs AA264532

and AA441674.

<400> 376

gagtgggtga tgcttttccc gtctgttttc ttggcggact ttggtcggaa tcccgccttt 60
ttctgactgg cgattgattg ccattcctgg cctttcgggg tggactctga tcggaatccc 120
tgtgcttttg gcgtggcgga gactgategc catctcgccc tcgtctggtg ggactctgat 180
ctgagcttcc cgcccttctt cgcccccttt gaggactctc ttctcgcttt gctggcttac 240
tcgatctcgc tgggcttaaa tcctagagc tgctgcgttt ttcttgctta attctgacgg 300
gtgaacttcg tctggatggt gagaattc 328

<210> 377

<211> 533

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (102)..(311)

<223> Area matching *Drosophila* EST AA141908. This EST
forms a 794bp contig with EST AA802528.

<400> 377

gcacagcgta agacgacgag atcctctctt cgaaatctat ggcatagcca gcatcaaaac 60
aatcacgcag ttccaatacc aaaatccatt gcatacttgc aggcacactc cgaaaatgcc 120
gcacaaagac gaaacagtcg gtctagttag aacagttagg acaatgaaaa cagcgcgtcc 180
ggcaccgta gggaacagcg tgacgaggcg gcgggccgca ccgttctcca gtgggcgtgg 240
catgtggtca aatccacatc cgtggagccc acaatgttcc tgtacatgtt cgccttcatt 300
atcacctcgg gtggtggagc agaacttctt cctctacaag tcctgtcggg ttaacaggaa 360
atttcacgga gggagatctg caggaaatct caacaagccg gagaacgaag gagttccgaa 420
cgaaggcaat gttgaccaat gcctgggttc ttcagtgggg agaacatttc tgcccacgtt 480

ttccccatta ttctggccct tttctgggct cttctcggat cgacggggcc gaa 533

<210> 378

<211> 612

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(100)

<223> Area matching *Drosophila* EST AA539224 (inverted).

<400> 378

gtcccagcga aaaactttgc aaaagggtgat ttttccaact acttcgcgag agagactagt 60
ggaaaaggca agacgaaaac acaactaagc gaagtgggtgg gttggccagt gtggccgcag 120
gtggcgaacc gccaatacgc ccccgcgca aaaataccac tttctttaa ataccaatgg 180
gtcttaat tttgattcta ttcttttagt tttatttttg ggcccaaatt ttcgaggata 240
atagttgaat attgtcaagc taatacctat ttcgctatat tattattatt gttaaaacta 300
atgatgaaga attgtaaagc tgaaccattg tttaaaagta ccaaaacaag ccaatttact 360
tggttttact ttacttttct tctctttaat gaagaaaaga gtttacttat gccaatgcct 420
gcagagcctt gctgtatcat cagtttctgg atggaaatgg agacaaaaca caataccaat 480
ctattaaatg acaataacta tcaattaaat gactaatatt ggctgtcacc aagtaaccta 540
tccatctat ggaagagtag gcattctcct gggttgaatt aacaaactct ttgggggcta 600
ttttaatgaa ga 612

<210> 379

<211> 837

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (431)..(622)

<223> Area matching Drosophila EST AA246367. This EST
has sequence similarity to human ribosome S6 PK
gene.

<400> 379

gtcagtagtt ttggatttgg cccaaagagc gaacaaagcc gggttgagtt ttctgggtaa 60
tcgtgtcaag gttaaataca tgtgctccac ttaacaaag aacgatagag acggcacttc 120
atctggcatt gaccagccac cctctgccga catttcaata aaaccttgag acatccaccc 180
ggttaaagtt atcaattatt ccaccacact accatgtttg ataagctctg tggcagctgc 240
cttaaaatgg catgaaatat tcacagggaa gaagttgccg gtttaatttg atatggacgg 300
gaattattaa actatcatat ttaaccataa gtacatcctg acctgcaact tgtaacaaat 360
tttcttatct agcttgtgct tgcagttggc ccggtcttct ttatcactat cattgagtgg 420
aatgactcac cgtagtattt cagatcggtg accgcctcca ggtcccgttg atgggcctca 480
ttgtccagat caaggggtgt actattgctg gtgggcatgg cgtaggaggg cgtggtcgac 540
gaggaggcct tcgaggetgc tgctgccgct gctgcagccg ccgccgccgc cgctgcagct 600
gcattgttgg acttggcctt ggacaagctg gagctggatt catcgatctc tatcccgttc 660
ggctcactct cctccatgct ctgggtccgta gtactcccggt cgggaatccg cgteccgtcct 720
cgctctccgc atccgatatg caaacaatat ccgccacatt tgtggtggcc gggatggaag 780
gtgtgggccc gtgatatggc tccgggaaag tgtaatccct tgcaaagctg aaatggc 837

<210> 380

<211> 654

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (46)..(319)

<223> Area matching Drosophila EST AA817295.

<400> 380

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cgtaaaacca tggcgttctt ttcagtttca cattggcggc cggtgagcgc ggacgtgagc 60
atgtatttct gtttgagtgt gtgtgagtgt tagtgtttgt gtaagaagt cggcggcaac 120
gaaaacgtaa aatagtgaag cataaaggca caaagtgaag aaatactcgc acataaacgc 180
atgttagtgt gtttgtctaa gcccttctac ctcttttttt gctacctgcc aatttggtta 240
ctttattgtt gctaccgctt gcgtgccgtg aatcaaagta acaacaaccg ccacaacaac 300
aacatgcaca aataaatgta agtgtgtaag tgaccgtgga gcgatttaat aacagtgcaa 360
agccaggaat agcaactaaa atctgttttt aaacgcgcga cgaatgagtt taaaatcgat 420
tgcagctcgc aaaaattggt caacatcaca aatagtagaa tgcaccacac aatgcccttt 480
agttatatac catgtacatg tagatgtatc atatcccgtg actcatccga ttgcttttg 540
catatgcaat ctctacgcaa attacttggg tgaccaaaag aaactattat aagttgcgtt 600
gaagatacat aattgtcgac cgaaatttca taatcatggc gagatattaa taat      654
```

<210> 381

<211> 387

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (35)..(383)

<223> Area matching Drosophila EST AA439743.

<400> 381

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gtgtggcagc cagttagtcg tgctccgcta gtcgatgtcg acggttcgct gttttctgtg 60
ttgctcgccg cccgttcccg cctctccgcg cgcataatga agtctcgctt attgagtcct 120
gaaaacaagt ccaatctgat gtacggccgc atttccaagg actccctttt aaacactaat 180
tcaagcacgg catgccaggc ccaataggtc gagtagcagt gggcgcgggg ctgcaacaat 240
tagagcaata attgttgagc gccagcctat gcggtctaca tagaaaccga actaccggac 300
```

tatcgcccg taaccaccta tagtttacgc ctggcttttt tggtagaacc ggcccaaaag 360
cccgttcaac caaaaaaaaa aggtaaa 387

<210> 382

<211> 548

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(264)

<223> Area matching *Drosophila* EST AA441568.

<400> 382

catacgccca ttctgcggga atcgcccca catccaactg gtcagtgcg attgtgccag 60
cgggtgagtgg agatggcgcg cgaggacgag gaacgcatcg tggacaatga ggaggtgtcg 120
caaccgacgg aggaggacca agtgggtcagt cgggccggtc ggcgtgacaa tgaactgagc 180
cttcggtccg gcggctgctg catgccctcg agcacgagcc accggttcat ggctctgggtg 240
ttcatgtgcc tgctgggatt cggtccctat ttctgttacg atgcacccgg cgccctgcag 300
aactatttca agaaagatct taatctgacc tccgccaggt tcacgctcat ctactcgatt 360
taactcgtgg cccaatgtcg tctgtgctt cgtggggagg ttcccttacc gatcgactgt 420
ttgggcattc gactgggcac gattatctac atgatgatct gctgggtgggg gtcaattgat 480
cttttgctg cgcggcattc tggacgcttc tggatgatga tctggggacg ggttatcttc 540
ggattggc 548

<210> 383

<211> 579

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (337)..(408)

<223> Area matching Drosophila EST AA247082.

<220>

<221> intron

<222> (409)..(478)

<223> Probable intron in gene represented by EST
AA247082.

<220>

<221> misc_feature

<222> (479)..(568)

<223> Area matching Drosophila EST AA247082.

<400> 383

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attcaagcta aaaaatagtt gtttcgccac tatttggtgtt cgttggtatg cctatcgtgc 60
aactgcgtcg ccggcatttc cttatttggt ctgctgcgca aagaagaaga attgctgcga 120
acggccggttg aaaaatcgaa gcagagagcc aattggaaaa gcaataacaa cttggctctc 180
tcgcaaaaca aacagttagc ttgtgataag ggaaattaaa ttactttgtg tgcgaaaaaa 240
gagcgctaatt cttaggtgga attaccaata aaacagtaaa agaaacaaac tgcaaacgct 300
ttccagcgct ttgactcatt tagtgccaat atttcagagc ctgcaggtga caaaatgcgt 360
tgcagtttgc aaaaggactg cgcagctccc acgcaggaaa attttcgtca agtaagatga 420
tacatgctga atacatttaa actgaactaa aaactattca ttgcatttac tgacattcca 480
gcagatgcgt tcccaattgt gatttgcttg ctttgctgct tttctgcage ggtgaaagtg 540
tcgccgttga cgcagccaat cagctggtaa gtgggccgg 579
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<210> 384

<211> 828

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1) .. (321)

<223> Area matching *Drosophila* EST AA201685

(inverted). This EST forms a 868bp contig with EST

AA540405.

<400> 384

```
ttctcggcct tttttgttgt ctgggtgct tcttcttcca ccaaacgaat gcgctgcgcc 60
tccagttcgc cctcatcttc gctgtcgatt tggagtgcta catccggcag atcgctectcc 120
tctctgtctt cctcatcttc ctctcttctt tccatatcgg actcatcgga ctctctgtcg 180
ccgtttgctt tcttcattgt ttgcagcgga tttgcacat ttgccattgc cattttcagc 240
atgtcagaca cgaaacgctt gcttttcttt taacaaatcg gcaaaaactg cggcgcagcg 300
ttcagaacaa atccaaatcc accgacgcgc ctggaaattt ttatttttct gcctctctct 360
cactctctct ctctctgtgt ctcttttagc gttcttacct ttgtttgtgt tcgtgtgcga 420
gcgtgcgaaa ttcggcgtag atgtgtgttg gtgagcgtga tcgcttgcaa cactgtttga 480
gcgtgtcagt gttatacagc gccttcccaa aggacagtgt tggaagtcgg agctgccgca 540
cgcgctataa ttcaaataaa aaggagcggt aaatgcgaat tgttaaagta aaagagcagc 600
tgccgccact aatgccattt tgatagatat ttgacttttg gcgcagaagc ggccaactat 660
ttgtgtattc cgttcacgcg ctcaaattgg acgtatttcc caatgcactt aaaaaaaaaa 720
ccatgttaaa tatacattaa aattctaaga aggaccaaag ttttgataa tatactcctt 780
ggaagcttct ttaacattc ctttgaggtt agccactttt ctatataa 828
```

<210> 385

<211> 472

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (83)..(218)

<223> Area matching Drosophila EST AA540693. This EST
forms a 1450bp contig with ESTs AA441321, AA440080
and AA392794.

<400> 385

gccgccgcca aagctgcca acacatacac gaatgtaga cacttcgcgg tcggtcggca 60
gaaacaggca attttatacg ggcgaaaagt tacaaaaaat aattttccca cttttcgggtg 120
gcgaaaacga agaaactgta aaaaatggac cagagattta agtgcaaac atagaaacat 180
cttgcgataa agcgtgctaa tccggggcat aaaactggta ctgccattat ctgcgttttt 240
taattgcttt tgtttatttt ttgtatagga cacagtataa tttttctttt gcgctgcgcg 300
cgtgtgagtg agtgtgtgtg tgtgatttgg cactcgctg gtttctatgg tatgtgcccc 360
tatcgccgaa cagagttgcc gccttcaggg caaatcataa aaaatatatt gggctgtcaa 420
ttgaaaaata ttgaaaaggg ccaagcaagt gaattatatg ccgataagcg gg 472

<210> 386

<211> 1082

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (452)..(1044)

<223> Area matching Drosophila EST AI295950.

<400> 386

gcccagggca ttatcagttg agttaccagg aactcgtttt gtggccccga gagacaagca 60
tggaagactc aaaccggcat cacatttgct gctatcagcg ctatttatac gcgccatcag 120
cggaaaaacg agttgggaat cataaccagc cgaacgcgat atgaatagca caccccaatc 180

cgaaagatac gggttcaaaa cccgcgcggg gcgaactcat taaatatttt tagatctatg 240
tgaaccacat gtttttgtgt attttattaa atatacattt cccatttttg attgcagggga 300
atcacttggg gctgcgccta cagaataaca ggcagcacgg cactggatta tctcaagcag 360
cgggagtgca cactgggtaa gtaaatacga ttgaagagaa gtggggacca tcatctgagc 420
taaccacga tgactccaac aggtggctat gcaacaatcg ataccaagtt cttccgcgc 480
gtcgctcgc aggacacgcc cttcagcggc gaggcggctg aggtactggg ctatgtggcg 540
acgccagaga atatctattg gttgggcat gacccggctg aggagattgc ccagcagatc 600
gtatcctgcc gcggtcccag cggacacaat gccgagtacc tgttgccct ggccctgttc 660
atgcacgagg agattcccgg cgtgaggac gatcatctgt tcgagctgga gcaattgggt 720
ttagaggaac tgtaccgcc ccaaatacct ctgtcatctg tgatgggccg caatccagat 780
aggatacgc gcgactcgca cgaggacatc cgccgccgc catccttcga gttcacctcc 840
cgtgtgcccg acaccaagct gcgttgctg aacatttgat ttctggtgtg ctggcggcca 900
agtgtatgc aggtcgcgtt ttttgctaca gcaaattcca aattattgat cgacatttta 960
gcttggtagg taaccagagt ctattgcaa atttgacgta tttctttaa ttgtaaataa 1020
tcctaggcct aatcataaca gcaactctca taagtgactg attagccata actaggatta 1080
ag 1082

<210> 387

<211> 505

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (2) .. (339)

<223> Area matching *Drosophila* EST AA439667.

<400> 387

gtcggtagcg ggttcagcgt ttttgttcaa cggattagcg caagttaagc acgatggcgg 60
cccagacgat actgtttgat ttcacgctgg acaaggacaa gacggcggat gaggaggcgc 120

gcctccaggt ggccaaaatc ctgcgtaacg agctggagca gctgttcccc cagctggagc 180
tggcctactc gatggagtcg ccggaaaacg gctactttgc ggtgctgcac gagaacaagg 240
acacggtgat tacctgccgc atcttccagc acggcctgct gacgctcaac gtgggagtac 300
ttcctgcccc atggcaagga gccgagcata tccttcgacg gtaccgtagt tcagtgccat 360
ttaggttcc tttaaaaaac tcaaaaaaca agcaagcaaa caccgacag cagcaccacc 420
accacatct ttcttacctt cccattttcc gtgtctcgtc tgaattattg gggaaagggg 480
tttttccacc acccgggtna aaaat 505

<210> 388

<211> 637

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (12) .. (394)

<223> Area matching *Drosophila* EST AA539198.

<400> 388

cctcggcgca tttttttcaa agcgaaacgg cagaaaaatg ctctggcatt ttacggattt 60
ctaattgtat tatttatgtg agaaaattgc aaataaaagt gagtccatca tgccacccaa 120
gatggagccg attagcgtgc gcaccgcgcg tctgaacaac ctgattctgg gcaaaggagc 180
tggcgtctgt gcgaagcccc ctggaagcgc ctccggatca ggtattcccc cctccaccag 240
gagaagcatt gtaccctga gcaccactag cgccgccgtg gccgaggcca tctgccgcga 300
gggactcctg gacgccttct gtctgctgta caacgagtgc gacaaggata cgctgaagaa 360
gcgcgatcgc aacatcgccg agtttgtcaa caaatgtgag tcaactgcat tggtcagcag 420
ggttttcgga tggactatct accattctat agaaatggaa ctcagaaccc catttttact 480
tcttgggtct gagaatctac ttttgctaata catattccat tattaaagcc cacaaaatta 540
ttgggagtag aatctcttat agatttacct gtatgttccg ggttcctct tgaatatagac 600
tatgcctagt taccattat attactatct aatttct 637

<210> 389

<211> 518

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (83) .. (227)

<223> Area matching *Drosophila* EST AA696927. This EST
has sequence similarity to *C. elegans* ADP carrier
protein gene.

<220>

<221> intron

<222> (228) .. (497)

<223> Probable intron in gene represented by EST
AA696927.

<220>

<221> misc_feature

<222> (498) .. (518)

<223> Area matching *Drosophila* EST AA696927.

<400> 389

tggtgggggc tctgattccg gcggttcttc gctcgccagt acgctccact cgcagttagt 60
taatcgcgga acgaggacga ggtggtttcg actcgggcgg attggattag atcggcttgc 120
attgatgagc taattagacg cgggaattgc tcgcggaaac aacactgaac cagaagcagt 180
caaagctaaa aaacaggaat gccgttgacc aagagtttgc caaatgtaag tttcagctgc 240
gattgccgag cgactgacac gtggttgcttt tgcaattgac tgtcagacgg gagagcgag 300
aaatgagagt gcgactgaga cagtggcggg tagcgaaggg ttgtttgtga actaccata 360

aagataaaag tataagtaaa tacgtacata tatacagcaa aaagatattc aaactaatca 420
agtagaggag aagaaacccc aatgaagcaa ccctttacca caactaatta tttactttgc 480
aattcttctt tgcagtctcc gtcgcttttg aagcgcg 518

<210> 390

<211> 500

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (360)..(500)

<223> Area matching *Drosophila* EST AA438961. This EST
has sequence similarity to Human KIAA0160 gene.

<400> 390

catgtgagtt tacgtgcag tgtgcccaa tatggttttc actaaatata ccagcaaatt 60
gtgtcggtgc cacatggctg taactggcgt gctttacagc actgaccaa acagctgtct 120
gaaaggtgca ctaattactg tctttcattc aatttactaa ttaaaatagg aaaaatatat 180
aaagtataac ctttaaaaaa tgttttgtac taaacggaga agtaaagca tatgaaatca 240
aattgtttga aggactatca aaacagtgtt ggcaaacgcg caatgtatta ggactggcgt 300
tttacatgat tggcatgacc gcaaaaaaat aatgctttca tttgcaatgt ttgtaagcga 360
ataaagtgct tgaactcatc aacttaaaca agtacaatgg gcatatgaac aaattattta 420
gtcagagtgc aactggtgaa cagtaaaaca aaaaaattcg tcatgcagtc gtacgtttgc 480
tagtgcgccc ataataacgc 500

<210> 391

<211> 641

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (53)..(260)

<223> Area matching Drosophila EST AA735138 (inverted)

<400> 391

```
gatggatgga tgaatgggtca gttcgcattg ccagctctag cgattcactt acattgctgt 60
atgagactcc caaaagttga atcaacatct cgttcggcga ttctctgcct tcctcgcgga 120
tctcgtctag gcgctgcagt cgctcactct gcgccaggca gacccggcac gtctgtgggg 180
taagctcgac gcgcattctg gaatcctgct cgaaatttaa tttaaagaac cgctcgcgta 240
gtattgtagt gttaaaattt gtgttgctaa agtgttggtt aaagcgactg aaaaaagaaa 300
cgaaaagaca tcgccatttt ccttaccagg gctgcatagc atcggcgaac acgatgtggt 360
tcattttgct ggttcgggga agcggatttt tggttaaata tctgataaac atgtttgctg 420
cttgtgacaa tacattggaa atatttggtc ctttaaccat ggctaaacga tatgatatga 480
taactgaaag tattccccag tgtgcctata aacaccaacc acttgtaaaa tgagaaagaa 540
aatattaata cttcaaatat tcaaataata tgaaaacaat tatatatata tttatatatt 600
tctttcatat ttaccgtata tttagataga gtaaagaatt c 641
```

<210> 392

<211> 287

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1)..(237)

<223> Area matching Drosophila EST AI064414 (inverted).

<400> 392

```
ggtcggacaa aaggcatttt ttttaattgtt taaaaatcat ttgactgcaa cgtttaaaac 60
```

aacaaatatt aaccagggct gcacgatcag cgggttcac aatatatgta tcttcaaaaa 120
cggctgattg gtggcaatgg aaaagttggc gaaatttggt tttttatttg aggaaacttc 180
gattaataat ccaacagttt aacaacaatt cggaaaatac gttggaggga aatctttcga 240
taggttacta ccaggggttg tcgagggcag ttaggaaaat ggaattc 287

<210> 393

<211> 543

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(67)

<223> Area matching *Drosophila* EST AA540712 (inverted).

THIS EST forms a 809bp contig with ESTs AA440879

and AA440431, and has sequence similarity to Human

Cyclin G associated kinase gene.

<400> 393

gctgtaatcg acaagtgata cacctaaaat atctggcgcc cgtaaactga actaaaacat 60
tttcgtagcg ccgtggccac aaaaaataa aaagaatcca gggctgcgga ggagcaggtt 120
cctcagcagg gtggagcgga atcagtttgc tccgatagct tgatcgcgca ggcttggtc 180
accatcgata tgtggcgctg tgcctttatc gatatttgac gctgggctct tatccgatgt 240
ggcgcgcgga taactagatt atgaatttcg actaaattta gagggtttt aagcaaacat 300
tttgtaggtt gactcttcaa aattcaagac gtttaatcct ggctttaaga ttgcacctgg 360
agggtgattg tatttatattt aaaatgcgtg gcagtgccaa cgcccttgcc gaggttttaa 420
ggagatcaca gtttttgctg aagcagtcac gtcaagatat atgctctaaa agagttcttc 480
cggctagttc atactcttca acaagtaccc atttagcttg ataccggtta aaagagcgca 540
cac 543

<210> 394

<211> 682

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> Complement((596)..(682))

<223> Area matching *Drosophila* damage-specific DNA
binding protein, Accession number AF132145.

<400> 394

```
ctttggacta gtcagccgcc acgaggataa aaatcgtttt cgctgacttt taacgcgcta 60
aaatgtttcc tgacacttag tgtgaccgtt caactgttaa gaactaatac tgtccggctc 120
aggaaaatat actttttatt ttggaaggta ttccatttat gttcaatata aattatgttg 180
cagagagcgc gtggatttta taagcttggt ttgattcttg tacaagcaaa tgacacattt 240
aagatttcca taaaagtcta gaagatcatt tacagtcate gcataagcca gaaaaaaacg 300
aatatcgata tgtgtttgtg ttgccccaac tctctctttt ggcaagaaaa atcgatttcg 360
tttttttgca gctctgggac gccttcaa at tgcggttaaa ctgaaactgt ttgaaaatag 420
cttttgtaat aagtgccttt aataccacta ttaccacac tttacttaaa tttctaaagc 480
aatcattggt attacatgac aggattgttc agatattccc ttacaagtta ttacttggtt 540
acttattttc ttggatggaa tacgtataat taaatataat atactaatta aaaataaata 600
cgaagacaga gaaaagtcta aatagaatga gctaatttaa gtaaataaat atatagctta 660
cttagggccg tgggtggttg gt 682
```

<210> 395

<211> 513

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(513)

<223> Area matching Drosophila EST AF007159.

<400> 395

gcctcgacgt tcgctaacag agctgagcac tgttaagcgg cgcttcgtga ctgtgagccg 60
aacgcatacg aacgacctac gccagcgcgc tcaaacctgt tggccaactg agtgtgcaac 120
aaacatgttg tgtttacgtt ttttccttgg cctaagcggg ttgagcgtgt tgctgtcctc 180
catcaacatg ttgcactttt cgggcttggc aacaagtgtt ttttgtttcc aactaccaga 240
tactctttct atttaactgt atttatgggt gtagttatat tatgccgtta attgtgaaat 300
gttaccaatg agtattgcat ataaaaatca tttaaaattt acatattaca aactcaagct 360
gattttatta aaattaaatg tatatatcta agtcctattc aaaaaaaaaa cgtatcaaca 420
gaagctgcgt aatatattgc ttaattcaaa ttggacattc agcccggaata aaatattttt 480
gacagatcac taggaagctc tgacacggaa aaa 513

<210> 396

<211> 958

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (13)..(235)

<223> Area matching Drosophila EST AI511691 (inverted).

<400> 396

tatgtaacca acctttttcg ggtttcttag aagattcagt ggaagtggcc agaggtgcag 60
gagtctgcaa atcaggaact tcatcaaaac gattttggcg cacagaaaat gctgccgcct 120
gcaactcgct cagttgcgtc acaataagta gcaacaaaat aaataaaatg cgactcatta 180
tgcgtttaat gaaacatttg ttggcttata cttaaaaaag aatcgacaag ctcaacctaa 240
tcgtgttaaa ttgaacttaa aatgccgccca ttttgcactc gataccagga atgctcgata 300

tcacagcaag tcgaaagcag tgtactgtaa ttctcgtacc gtgtgctgtt aatgtcagta 360
acattttact gttaagcgca acttctctta ttagcaaatt gtgcaagcag ttcaaaaaat 420
aanaaatggt caatatagaa ttccattaat attataaaaa aataaacaaa tattttttta 480
gttgatatcc ttggcaaaaa atatttttaa aacctatgag tagaaatccg gaagccagta 540
aatcgaaaac ctagtggtct accaaaataa atttaataaa ttttaacaat gtttgtgaca 600
atgatcaatg catagggcga ctattgatat ttagagtttc acaaaaatta aaatgtattg 660
catcaattaa aattaataaa agaatttggt tttgtggatt aattacgttg atgttgttta 720
cgtctatttt aaaattgctt atgccggtag ttttgtatgg gaatcgataa taagcaaacc 780
aaaaatcacg aatatatccg gatgtttaac tcccttgga ttgccataag ttctgcccct 840
ctaactctca ngtggtttgt accggggggg tataaaacttc ataattggat tactctctta 900
taacttccca aattttataa tattatatta ttgcaattat tgcaatttgc atttactt 958

<210> 397

<211> 289

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(61)

<223> Area matching *Drosophila* ESTs AA264883 and

AA392712 (inverted). These ESTs show evidence of
alternative splicing.

<400> 397

gtctcgcttc ttagcaaaaa tggacgacga tgcttgctg acgggacgtg aacagagtga 60
ccgcattggcg accgttaata ttggttgccc tgctaacgga tctataccaa aaaatacttt 120
atggttctac caaatatagc aaaaacttca aataaccgaa aagtctgggg agaacatttt 180
tcaattgcat attctatgta ctttcttgag tcctataacc ttaagtcatt tgtagaaagt 240
tagattttcc ttttcttagc attattgcat ttttattttt atggaattc 289

<210> 398

<211> 538

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (30)..(451)

<223> Area matching *Drosophila* EST AA438399. This EST
forms a 821bp contig with EST AA439438.

<400> 398

gttttagagta caaattgtgc agcactagca agaagcagtt tagttacgtt tactccgtag 60
aagcgcgata caaaaaagtc aataaaaggg tgaaaagcga acgttctaga cacagaaagt 120
attcaaaaat actgactcag tcctggcgca gcatcggtag ccaaaagagc ggctcttcac 180
ggtgaaaagt ttccgcaaaa tcggcatttc tgaaagttgc gcgttcacgg tatgcgaagc 240
gtggcggtgtg tgtcgagttg agttacctgt aattgtgtgc gcctgcgaga gtggaagtgg 300
agtaaacctc gccaccgttt tgaagttttg gaaagatata gggataaccg cccagcgttt 360
attttaacaa atgtcggagg caactgtggc caaaagccg gaggcggtgg aagatgtgaa 420
tgcgtcgacg ggggacgaga agcagactcc cgtaagtagc cgcacataca catatttagc 480
gacaattaac atagcacggc gatacgaca ccaacacggc ttccgtttgc ttgcca 538

<210> 399

<211> 627

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (600)..(627)

<223> Area matching Drosophila EST AA440272. This EST
forms a 1324bp contig with EST AA438941.

<400> 399

```
attcaggtat tctcgcaaaa taaatgtaca tatgtatctt tatatatata tgtggggtcg 60
tccctctgac gtaccaagtt tgcttgaata gccaaacaaa caccttttgt tgacgtaaat 120
agcacacaca gtctacacac agtcacacgc taaaacgata atgcagccgt tacgtagtta 180
gcactacgtt acaggttggt gctacctgga aatgtaatcg ttacatgtct tatttccct 240
tttcgggttc ccgtttctta ttatacacac acacacgcgg ccatcgaaat agaactgttt 300
tgttttacct ttggaacgtt acatttcgta ctgaggtaaa aaaggatttc tgcgtatac 360
tggacgtttt ttccatgtgt atatgtacat attatcttct ttactcaacc taaatttaaa 420
tatagacctt ttaacgtaag gaatgtatct caataaactg cattgtaatt aatgcggttg 480
atgctgattt cataaatagt ttcataagaa ataagacttc aactatttct ctggtaacat 540
aagccaatat gtatcggttc gaatttcaat gggttcttct gctcttctcc aaaaaccagg 600
atcagcacgg cttggaatgc gaaagca 627
```

<210> 400

<211> 682

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (65)..(483)

<223> Area matching Drosophila EST AA264865.

<400> 400

```
gccccgatca agtcttaacg gcaagttgca gcaacaaaca ttttcattcg ttttcgcac 60
gtcgaagcgt acggttcata ggaggaacgg aacgaagcgg ggaacgcgac ggaaactagt 120
tgctgttttt ttgtccgtgt taaataattg acacaagaaa atttagctac acttaagcaa 180
```

agtccgcgaa aaatctatta aaaatcggtc gtcgttttgt gtgtgtgacc acgaaaaaag 240
tgccccgatc ggaggatttt aataaattca attaagggtc cgtcccaacg atcgtttttc 300
attgtctgac gctcacgct gatgtacaaa tgaaaaagta aaaatttaaa taagatcaaa 360
gaaagaaaga tcacagtaaa atttaaagtg ggattgactg cacaagaaaa agaaaagttc 420
cttacctcct agccagaagt caaaagtga gcggaaca gagtgggaga taacaattaa 480
cggttaagtt gtaaagctaa aactacacaa taaacatatc atgaaaaact ttataaaaca 540
taagaagggg ggcattttat tattttgggg tatcagcatt tacatcacct tggttcgaat 600
caaactgatt ttaacatgca tttggaccaa ctacaccgtt cgaatgtatc tcttatggaa 660
atggtattgc tatattatcc at 682

<210> 401

<211> 668

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1) .. (246)

<223> Area matching *Drosophila* EST AA263693.

<400> 401

gtgcagtgcg tgtgttaatt aattttgggt gccatttcgc acattctgta ttatttaatt 60
ggcagtgc atgttccggc ggaagagggc aactttccgt tcattttcga gttccggtt 120
gtcggccaat tagcagcagg tcgacaaaga aaaagcaaaa acaagcgtaa aggataagcc 180
aacatgacgc actgggagga cttctacaac acacacctgc cgcccgcgga cttcaggagc 240
aatcgctccc tgetcaagga gttctgcgaa cggcacaaca agctccagaa tcgaatcgtc 300
ctcgtcacgg tgagctggga ttaatccaaa tccgaattag gattaggatt agcgctaaat 360
aaccactgtg ctccgttaat taactggcca agctggtgaa agctttcatg gttgagccga 420
gcgcctgggg cattaaaaac aaatgtgtaa agtgtggaag tgaataaatt ttagattggc 480
tagaaciaag ttcgtaaatg ttaaacacat gcaggggcgc accagcaatg cataaacaat 540
taacattttg tgaatggaaa aaaccaaagt gtaaagtggg ttttttttta acatacttta 600

aaaagcaaaa acaccttttt ttggtgggtt taaattttca tttcagaaat tatcttagtt 660
aagttttca 668

<210> 402

<211> 563

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (137)..(160)

<223> Area matching *Drosophila* EST AA698620.

<220>

<221> intron

<222> (161)..(378)

<223> Probable intron in gene represented by EST
AA698620.

<220>

<221> misc_feature

<222> (379)..(475)

<223> Area matching *Drosophila* EST AA698620.

<400> 402

cccggaatga taaactcaac atgcttgcta gtgtgaccaa cgtatctacg cacgatgcga 60
cccacctatc gatagcttct tcgccagtta ttgccctgcc tttctcatca ctaaaaacag 120
cggcatttta ttgtgcaaat tagaatttct taatataaac tgtaataaga actgctcact 180
atgtctttta tgaaccccggt ggatatgggtg gatgaggacg ccgccgacct gcagtttccc 240
aaaggtaacc aacgccctac accaaccgaa atgcaactta caagtgaaac tggctgaaac 300

ctttggcttc gagtgcccca aaagtggcac tctccacat ttttaccaca ctgaattgcc 360
tctttgcagt tgagccactg gggccacagg ttaagcgggt catccatgca catcaggatg 420
aacacaccag gaactccatg gttttgtata atccgcacac gttgcacagg tacttggagg 480
agatggagga aaagacgcgg gaccagatag ccagtgttcc atcggctaca aaggatgcc 540
atccggtgtg ccacatgtcg ctg 563

<210> 403

<211> 618

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(51)

<223> Area matching *Drosophila* EST AA391350 (inverted).

<400> 403

gtctggacac tgtatcacca acttttcggt gcactgcact tttttcgccc gcgacagcgg 60
tagagatgta aaataacaat ttggcatcga ctaccgatga ttcttggcga tagttgtcga 120
ttcgcttttt gctatcgaag ttaatcgatt catcggtcga tatctacact ctacaaaatc 180
tccactcact tatgttagcc aatacaacaa ccaagtcgcg gcggtattca aaaaaaattt 240
caaatatata aaaaaatcaa acaaatgatt tactataacc gtagcgaagc tttctcttag 300
gtattatggt taatttcaa tgcgaaccct taaatgagtt aaacactggt tggatcgcga 360
tagtttacgt ttattttggt tgagaaatgt ctagaacacc aataaagtaa attcagtagc 420
aaacaagttg gattagtaat attaaatc cacttgctgt tcgcatttat tgcttcttat 480
ggctcttctg gacttaagag tatatctata taaataccag taatatgagt ataataacca 540
tttcgggtat gaaaaagatc tacaatccaa tgcccttcat ttacgtttgt aattgatatg 600
agtattgcct cgattcat 618

<210> 404

<211> 499

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (100)..(499)

<223> Area matching *Drosophila* EST AA392183. This EST
has sequence similarity to DNA J genes.

<400> 404

```
atttctacct atatatgcct ggagcataca caaatctgtt cccaatctg ttatttaca 60
gctcccagat agtaattacg cactacttcg tctgttcaca gtaaacagca aacaaaatgg 120
ttaaggagac tggatattat gatatacttg gcggtgaagcc taatgccacg cccgacgagc 180
tgaagaaggc ttaccgcaag ctggccctca agtaccatcc ggacaagaac cccaacgagg 240
gcgagaaatt caaggccatc tcgcaggctt accgaagtgc tgtccgatgc ggacaagcga 300
caggggtgtac gacgaaggcg gcgaggcggc catcaagaag ggcggcgagc attccggtga 360
cttcgcgaat cctatgggac ttctttgaag aagttctttg gcgctggatt cggaggtagt 420
gggcggtgga cgcaggcgca gaaggcggtg caagggaccg tgggtgcacca gatggtccgt 480
acagctggag ggaagctgt                                     499
```

<210> 405

<211> 489

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (149)..(348)

<223> Area matching *Drosophila* EST AA696390. This EST
has sequence similarity to Ubiquitin fusion

protein genes.

<220>

<221> intron

<222> (349)..(411)

<223> Probable intron in gene represented by EST
AA696390.

<220>

<221> misc_feature

<222> (412)..(457)

<223> Area matching Drosophila EST AA696390.

<400> 405

gcttgtgccg caacccca cagtgtgcc acctgtgggc gaaaaagtta cgtctacatg 60
gtgttctggt cacactgccc cgcctgtgac aaacaaaata gaaaaaaaaat aaaacaaaag 120
ataaaatttt agcctcccc ctttgagaaa taaaggggtca tttgaggcag tttaaatacga 180
aaagaatcca taggcacgga gagccagca cacatagaat gtccacttc agcggcttca 240
acatgatgtt cccggaggga cgcaattttc atgccaacta ccaagtgett ctccgtatcc 300
catgttgcca ggaaacgagc gaacccgacg tggaaaaggc cggaagagg tgagttaccg 360
aagtgtaggc ttggcctgaa attcatgtga acaacacatt ccattcccaca gttattatgc 420
ctccctcggc gcttggacac gctcaccgc ttgaatggc gagtattcaa tggctgggtca 480
agctgccca 489

<210> 406

<211> 518

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1)..(267)

<223> Area matching Drosophila EST AA802961 (inverted).

This EST forms 816bp contig with EST AA817584.

<400> 406

```
cgccacaca gctcatccac tgcacccctc gccagtaaa cactccgctg cgacggctgg 60
cgggtgctgg gacgtttttc ggcaccttcg acggcgtctt ctgttccaat cctcgactgc 120
gtcgcgaacg gcgatccgtt tgttgcaatt tctggcctga cacgctgccg attcgtttat 180
ttaggcgttt ttttcacgct aaaacaccca agaaatgtga gcaaatcgat gcctctggct 240
tatcgatagt ccccccgca tatcgctcgg ccagcgcaac tgcggcatgc tcatcgataa 300
taaccgcgtt aagctgagat atgccaaaaa tggcttaatt tatgtgattt attaattttt 360
tattacggtg acgagcaagg aaaattagtt tgcagggcgg ttcatttgat tataagccaa 420
gttttttagta aaatattctt tttcttttga acacattaag agctggcaaa aaatactaga 480
tggtccggaa tatgccagaa taccaacatc tagaaacc 518
```

<210> 407

<211> 565

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (1)..(259)

<223> Area matching Drosophila EST AA699045 (inverted).

<400> 407

```
ctatagccca tggccggctg acatcccctg atcttgctga ccttctgct cagcggattg 60
taggtgctgc cattgtagtt gggcatgtcc acaaactggt ggatgaacct cacatctcca 120
gtgacctccc gtgccgtgga ctctggctc tgttcggtga gcagtcccag agcagcatcc 180
gccagacgtt gaccaagat ctgggtgctt tcgaacatat ccttaccggg tccggaggca 240
```

aagcaatctc cctcgccagt gggacaacgg gaggtcagta gatcacactc attgccggag 300
atcgagcact tgggacccat tatattgggg gacacatcgc caagggttga tgagcagaag 360
gcacccacga acttgccctt tccgggcac ttgttcggat tgtactcctt ttccaggagc 420
agggcgggcat aaccacatt gtcgctgggc accagtctgg ttggtattgg tcatgggagg 480
tggcatgcac cgcataccca gttgaaaagc gccaggaag gttggtttcc aaggctgaca 540
aatcgcactg gggcaagtg cttaa 565

<210> 408

<211> 498

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1) .. (99)

<223> Area matching *Drosophila* EST AA952055. This EST
forms a 1205bp contig with AA202358, AA202625 and
AA951416. Sequence similarity to Human SIAH
binding protein gene.

<400> 408

atcttgacaa aaatttttgc aagcgcataa aattaaacaa attgtagagt tgtggacaac 60
aaatcgccac tagaataact ggaaaaaagc gaaaatgggt agtactagac aaacgcgact 120
cacttgctcc gcagcagaga ctttttaact cgcaccaaac cgaagattgc gtcttttcgtt 180
ttcccgtaga atttgcgcat tttttcggaa ctttcacagt ggcgttgag cgaccgctct 240
tgggcggcat aagggttaag gggcatgtgg gtggctacgg gtgggagggt tccgcggagc 300
accccgctcg gaccttgccct ccatttggga ctaccgacgt cacagctgcc agctccgggc 360
gggtagatac acatcccgaa ttaacaccac gcgctccgc acctccgatt cgccgtctca 420
tgggaagtgg aaatgggaag tacagccctt ttggtccac atgcggattt tacctggggg 480
gtggaaaggg aaaagggt 498

<210> 409

<211> 601

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(601)

<223> Area matching *Drosophila* EST AA142266 (inverted).

<400> 409

aagcagacca agaaaaggaa taaagataag gcgctcagaa tcaagactgc aacgaacggg 60
aaatgccctt tggctctggg aagaaagtaa acaatcggag gtgaaggcgt ttgcgagttg 120
catttatcaa aacggattat tgtgcaatag agaaagggtgt cggacagggt gtgttttttaa 180
tgacacttcc cctcgaaact gcaacttcct catgtcaaaa cataactcga cgaaagacag 240
gacggatcaa ttcttacttg aagatttcac ttcttatagg gagatttgta agtcatatta 300
atggagtttag gcgtatgttc atatatcacc gggtataaga gtttaggaagt ttgaaaaacc 360
cgtgttatcg aactacaaga tatacgttag tattatatca ttttatttat ctagtttttaa 420
ttctacagtt ttttaatcca cctttaatgc aatacagtaa aactatTTTT ggagttctac 480
gtactgaccg gcaaattcaa catgaactaa acgcatagta caacttttct tactgtcgaa 540
agactaagaa attaatgcga gctgctccgc tggccgcaac gaaggagaaa acgtaacaga 600
g 601

<210> 410

<211> 628

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (52)..(534)

<223> Area matching Drosophila EST AA696974. This EST
has sequence similarity to hypothetical proteins
from yeast and C. elegans.

<400> 410

```
ggccagatgg aacatattgc tttcgggagc acaaggatcg ggtctactac gtctcggagc 60
ggattttgaa gctgagcgag tgcttcggct acaagcagct ggtgtgctg ggcacctgct 120
tcggcaagtt ctccaagacc aacaaactga agttccatat cacggcgctc tactacttgg 180
cgccctacgc ccagtacaag gtgtgggtga agccctcctt cgagcagcag tttctctacg 240
gcaaccacat acccaaaacc ggactgggtc gcatcacgga gaacgccggc cagtaccagg 300
gccgtgggtg tttactccat gaacgacctg cctctgggct tcggcgtcct ggcgcgttcc 360
acaacggact gcaagaccgc ccgatcccat gaccaccgta tgctttcatc agtcggatat 420
cggcgaatat attcgcgccg aggacacgct ctttttagatc catagatgct aagttttaca 480
tgttttagtc aataaccatg tttaggtaaa taaataagta tgctgaaaaa cggataaaact 540
gcttttgatt tatattttta tggttaatact gataataata ataattgata taaaattacc 600
tacatttcat aaattattaa aaaaaatt                                     628
```

<210> 411

<211> 1139

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (503)..(626)

<223> Area matching Drosophila EST AI532170. Forms a
1565bp EST contig with AI544333 and AI062662,
sequence similarity to MTF-1 gene.

<220>

<221> intron

<222> (627)..(733)

<223> Probable intron in gene represented by EST

AI532170.

<220>

<221> misc_feature

<222> (734)..(1069)

<223> Area matching Drosophila EST AI532170.

<400> 411

gtcaaaacca tccatagtga tgtgattttt tgaaaatcta tcaaaatatt ctgaggtaaa 60
cttatgcgct tttgcgtcgc gtgaaaaagt taacgcaggc aaacagctga taagcgttag 120
gtgttttgca aactggcgga gtcagtggcg cctagcctag caatttgata agtgaatgaa 180
aatacacaca tgccgtaaat aaataatggt ttcaccttac gcagtaaata aaaaataatt 240
aaattgcgaa tattattaac ttttgatttt gtattgaatc tcagaacaat ttgtttctgg 300
ttctttaatc gacacctact cgatagttct gggtatcgcg ccgatcttat ctttttcaaa 360
actaattttt gtctctttga ttataaaata caaaaatgct ttattaaagc gaaatattaa 420
aatattcaaa acgagtaaca gccacggata acaaccaacg ttttttctgc tttccaggcg 480
actacagctt taaatgcccc ggaagatgga tgccacaagg cattcctcac ttcctacagc 540
ctgaagatcc acgtccgagt ccacacgaag gtgaagccat acgaatgcga ggtgtccggc 600
tgcgataagg cgttcaacac gcgctacagg tgagtaatca tcttcactt cggaggactg 660
atagccaccg gaataaacca atggctgcgg gcccggccct attaattctgt aatcaacgtc 720
gcccgattca caaacagatt gcacgccac cttegtctgc acaatggcga gacgttcaac 780
tgtgagctgt gccagaagtg cttcaccacg ctgagcgacc tgaagaagca tatgcgcacg 840
cacaccagg agcggcccta caaatgtccg gaagatgact gcggcaaagc cttcaccgcc 900
tcgcatcacc tgaagaccca ccgaaggaca cataccggcg aaaagccgta tccctgccag 960
gaggacagct gccaaaagtc gtttagcaca tcgcatagtt tgaaatccca caaaaagatt 1020
accagcgaca attgcaaaac aaaggctcgca agaaaggcca ctaaagacca gcagaccaat 1080
gcagcgatca ggagcagaag gtcccagcag gaggagcaga ggaagaagga gttcattaa 1139

<210> 412

<211> 569

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (442)..(569)

<223> Area matching *Drosophila* EST AA567128.

<400> 412

```
ggttgtgcag ttcgggcgaa ctagttatga attgaaccgg ttcgcgcggt gctttttacc 60
agagttatca ggccatgcca aaagcgcgcc tatcgaactg gtttatgtgg tacatataag 120
ggaccctaaa tttaaatttc tggcaattgg gatttcaaataaaaatcaaata cattgaaatg 180
cactgtaaga atgtacactc tactagtcac gtttaattgt aaataaatat ataaaaacat 240
atagtattat taatttgatc aaattagaaa gcagtottag ggcccattat ataactctgta 300
gaaaataatt tccttatttt taatacattt cgcagtgtgt tctgatgtat tatcatttta 360
taaattagta ttaatttaag tgcacgaaca acctattcgt ttattcagtg ggtcctactg 420
ataacgataa gtccgatatc gataggagta ttgtttttat ttgttttaat gtaatataca 480
atacgaagta attgttttga tttcatgaga atgtcgaacg cgttggaacg ctgccaggag 540
cctactgtgg gccgatcacc gctaggaaa
```

569

<210> 413

<211> 574

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(79)

<223> Area matching Drosophila EST AA950480.

<400> 413

ccctggggaa ttggcagttc actttcgttg gtggctcgag tgcgacgtaa agtgccggcag 60
cgaagagcgc ttttccaggc acagtgcgcc actacttgcc tgcaagtcag ccacaacaat 120
ttctcggtaa ttgcgttgca aagtgcgtaa ttagagcttg ggggaaaaac tgcgttttcc 180
gcaataccag aacgtgcccc atttccacaa gagcgtacgc agatccgtga gttcagtgat 240
tcctctaagc tcaatgtggg aacgagagcc atggcgatga ctttgaaatg cggaaatgaa 300
agtacaaatt cggttgctg ctggggaaac ggctctgaaa attttacagc caataacaac 360
aaaggcaaaa caaacgcgta attgcagaaa tcagcttggtg tacctacgga cgaaccagag 420
ccccataaag aagaggggca catgccccct acccgcgcac ccattatccc ccctccgtcc 480
acaactatgg agcccaacag cttggtcgcg aagccctctc tcgcgctctc tctctctctc 540
tctgctttgt ctgcctttt atggactaac tttt 574

<210> 414

<211> 360

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (2) .. (360)

<223> Area matching Drosophila EST AA950161. This EST
forms a 1217bp EST contig with AA950864 and
AA950181.

<400> 414

cctccggcca agcgccataa ctccacaaaa ctcgatccgg aattatattg tgagttttgtg 60
tgaatgtcta ggcttgatcg agtcgacaat atcggcagta gcgaacgact caagttctag 120
ccagcacaaa gaccacattc tgcaaggaat ccgctagcga ggatcttgct gaaaccaagt 180

ggaagtggag gagacgagga ctccaggcgc cgcgcacaaag aacacaaaca acaaacgacg 240
agtgcgctca cacgcaaaca cgcattcaaa atggcgccca caaaagcaac aacgcgcgcg 300
gccatcaciaa gggggcatca tcagctgcag caggcagtga atcccatctt gggagccctt 360

<210> 415

<211> 649

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (30)..(194)

<223> Area matching *Drosophila* EST AA539625. This EST
forms 882bp EST contig with AA202440 and AA390927.

<220>

<221> intron

<222> (195)..(290)

<223> Probable intron in gene represented by EST
AA539625.

<220>

<221> misc_feature

<222> (291)..(366)

<223> Area matching *Drosophila* EST AA539625.

<400> 415

agacgtgggtt ttcccaactt gcaatgcagc gaattaacgg atgtaatgcg acgcatagct 60
tcccgatctt tggaacaag caaacgaagt tgcagccgc aggttgatcc ttgcatgaca 120
accgattgaa tgagagagat tgagacatca acgcgcagtt acgacatcgg gggattacag 180
tctggtcaga tattggtgag tccgagattc agatgcgaat tgggtgatgg ggtgtctgtg 240

gttactgcgc attacgttgg tegatcccc ctaaacgac tgctttcaca gggcaagcta 300
gcaaaaggaa aacaaacgcc atgtcgacag agcgaagctc gcattcagct gaaccagcgg 360
atttggcgct tttgttggac cgcataca tcaacaacaa caataataat aataagaata 420
ataataataa taataacaac aacaacaaca acaataataa taatgacaat aacaattgcg 480
gtcgcagcaa gaaccggtgg gaactcacag ggaaatatgc aactgctgaa gcccgaagct 540
cattagaatg tgccccgcag caatctgaca gcaccaagca acaaacaatt tactcgattt 600
gccagcgggc gcagcgggca taactggatg atcatatgcg cggccttta 649

<210> 416

<211> 572

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(255)

<223> Area matching *Drosophila* EST AA951297.

<400> 416

ggtgggactc ccgatatttt gtggagcgga aggtgttttg atttccttag catttagcac 60
aaaaaatgc aactagtata aagtactgtt cactataaca atttttaacc accgatagcg 120
agtgttcac tgttgtgctg agtaagagag atagagagca actagctcca gcatcatgag 180
aatacaacaa agcgccttgt tgttgttgct gctggcctg acgtcgcaag gagatgcoga 240
gtccaattgg aatggtttgt tcttaatttc taactagaat gagttcatca gcagccatag 300
aaaattatat tgcattcatg ttttcatatt ttctgatctt taagtgcatt ccaactgccgt 360
acttattaca caaatgcaca gagataaaaa ggggatgtga tgcgggttggg ttttttetta 420
tcattcttga taagaaacta gaacatcctt ttctcgttca aaacatacaa aagtccgaaa 480
tgtaagtctt ccttactttt ttctggggta tgcgcagtac atatctcaa gaatttgttt 540
atgatccata taccaccgac ccattctctt tg 572

<210> 417

<211> 654

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (20)..(95)

<223> Area matching *Drosophila* EST AA948996. This EST
forms 781bp EST contig with AA541068 and AA950730.

<220>

<221> intron

<222> (96)..(478)

<223> Probable intron in gene represented by EST
AA948996.

<220>

<221> misc_feature

<222> (479)..(654)

<223> Area matching *Drosophila* EST AA948996.

<400> 417

atccaagggtg cataaaacga caaagtaaga aactgtgagt gctgtggaca ttaaaccagc 60
ttcgatttca agaagtcgca ctccctgaaa gcaagcaggt aatgtaaaac attcatcgcg 120
tgcgatgcaa ggggtatttt gaagtgcggg atcgcaacgt tcatatgcgt acaggaatcc 180
tcgcacttgc atacatactt acattgcata ttctactgat gctaagggga ttttgaaat 240
gcaaaagggtg tcacgagtgc atttcgtgtg ctttcctgct aaggattgcg gaaactcccg 300
aacaactgtg gtttaagggt acacgggctc tgtttgccga atctgcgtat gtaccgcagt 360
ggctgtgtct gtaggtatgt tcgtttgggg gtaagaacgc ttgagactgg gaggtcacat 420
tttcctgaac ttaccattt tgccttagcg tcaatcgcta acccctcgcc tttgctttca 480

ggatcatcagg tccagacttg tcagtgattt gaaaacccga aaaccctttt gcgatcatcg 540
taacgaaatg agtgccgtca ccagcagcga tacagccatc agcggcatgg ctcttggccg 600
gagccagaca tctgccgtac tacgtgcgcg gcattgccgt ttggggaact ttgc 654

<210> 418

<211> 378

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1) .. (378)

<223> Area matching *Drosophila* EST AA941568.

<400> 418

ggccagaccg aaaaatagca tcgaaattcg agcgaacgtc gtgtataagt aaaacgaaag 60
ttgtgtcgct ctgtgcgaaa gagagagggg gaaccaata tttttgcaag ccagaagtcg 120
aagggtgaaat taaaatgcat tagccaccca attgaagagg agtcaactac gaacaaaact 180
cggatcttta agaatcagcg aaaaatcggt tgtgaacatc catacaacca caaatcgttt 240
ttgcctgctc tcgtgtagtt cctgtgtatt ggtgcgcgcg ccctgtgtgt gtttgtgtgt 300
gcgtgcgtgt aagcattgga atggattaac tacccaacta attccaaacc aataataccg 360
caacataatc gcaatagt 378

<210> 419

<211> 552

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (228)..(522)

<223> Area matching Drosophila EST AA801928.

<400> 419

```
gcacgtacat accaaaagaa gcgaggagcc agagagcgag agtggacagg ctaagagcag 60
cgaagtgatc tgccactcgc tacttccgtt ctctcacttg taataaacga gtgcaaagag 120
agcagtagca gcagcagtag caacaacaac agcaatcgac gggcaaccac ttgaaagcaa 180
ctcgtttcga tttcatttag cagatacctt ttgtacgttg attaagatac cttggcacac 240
acagacgcac tacaaaagaa gagaaggcag ctaaaaactg cacttaaaaa acacataaaa 300
taataagaag tcaactcgat taattcagaa cagttctcca aatgaatgta caacaaaatc 360
cacttgacca aaaatgtctt gagtaaaagt gtcgcatacg cgtaaagcgt acgtataata 420
tagaaataga tatatgtatt cgtgtgtgtc cgccagccaa tacaaaagca gcacaaaaag 480
gtgggttaaaa ggcattttaa atcaaacaat atttaaagtg ctgaaattag tgtggcgtgt 540
gcaaagaaag at 552
```

<210> 420

<211> 172

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> (14)..(98)

<223> Area matching Drosophila EST AA951147. This EST
forms a 695bp EST contig with AA695598 and
AA540269.

<400> 420

```
ctattgagca ccgacaacgt tgcgtgtata agacagttta cataaattat tatttacaat 60
tgcacagagc gttgatgttg tgcgttctaa gcgaaaaggt gaacttgacc ccggtgccga 120
tagaccgccg agctattggg tgtgaaattc gcgagcgagc cttgtggaat tc 172
```

<210> 421

<211> 411

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(279)

<223> Area matching *Drosophila* EST AA697191. This EST
forms a 1002bp EST contig with AA392404 and
AA438791.

<400> 421

```
atcccaagca gtagcaagca agccatcaaa atcgtaacct tgggcgtgtg ttaatcaagt 60
gatecgtaca tccccgcctc tccccccctcc ttttatcatc atacatacca ccaccatttc 120
tacatccaac gattttgatac tggattactc ggcttggttg attggtgggt ctgtttcgct 180
ggcgtttctg tttcctgca aacatctggc gagataaggg gcctatatag tttcgccaca 240
gccacctcgc aggccccccc tctcgggttc ccgccagcaa cgacacgaca gaacaaccaa 300
aacttgggtg gaaaaaccgg tgcttgaacc gtaagttgga taacgtcatt cggtttcgag 360
gggcaaaatt aagacttctg aattgggcca ttatattata cacttttcca a          411
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<210> 422

<211> 689

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (650)..(689)

<223> Area matching *Drosophila* EST AI518422.

<400> 422

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taaggcagcc acgcggtttt acagtcactg ggggtcgagg tctgtttgga tgaccccagg 120
ctacctatgg gtcacactat tggagggata tatctggact caagcgttgc tcacagaggt 180
cctatggcca ctaccgccac taccaattag tcccgccagt gtccatcatgt tccgcaacaa 240
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ctgctgcgaa cagctgttta gggttgcaac gtgcgcggtg acgcaaggca gccggctaaa 420
acgtagcact agaagtgtgc aacgtaaggc gacaaagtct gcaaccttaa aacggtagtt 480
atttacggat gctgacatta ttttaaaagt agttacacca tttttattgc tcttttttga 540
attaacattt ttacatctat tttgtgcctt acttacgttt ttctataaac atatcgatag 600
cacaagctgt ttctcttgc gcatctctaa tcacgtttac gtaaatttca gaaggagcag 660
caacaaggat gtctagaaat ttggttttt                                     689
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<210> 423

<211> 959

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (27) .. (689)

<223> Area matching *Drosophila* EST AI535025.

<400> 423

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aaattgagaa aaataaatcg cgtcgagtgt gggacgcgaa cggaatcgct gtgaaaatac 120
cgagttaaatt gtgcgtgac gaaactttcc tccgaaaagg atctgcaatc gaaacggaag 180
ggaaaacgca gagcaagaca tccttgccca cgcaggatag ctgtgtgaag aagacgcgac 240
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gataggccaa gagggagggg gagcacaac aggataagca gtggcagaag aagaagcaga 300
aggcggagcc gcatctgccc gcagtcaaaa caagagaggg aagtgcaaca aaagcgagat 360
taaagtgcac tcagctgggg gaaatgtgaa atgtgaacga tgttgcaacg tcgcgctgct 420
tgcacgcaca agtaaaagca gagtcagaag aaaagcaaaa ccaaagcaaa gccagaacaa 480
acaaaatata caaagtgaga gaggagagaa agagagcggg agtgtttggt gtatctgtgt 540
gtagtgcgtt cgcgtgtgcg cttgtgtgtg tgcgtgttac tttgctcaca acaaattatc 600
gtttaatttg cttcgatttt gcgacaacaa caagctgtgc gaaaggggat gtcctttcca 660
ccaccaccac tatcaccacc cctgtctccc taaggctcata ggtcaccagc cgagaggtga 720
gtaaatcaag ttgtttgaat tttgttacc aaaactcttt tgcacctaac gataacaaac 780
tgatgagttg acctcgctga aagccgcgta ggaaacgaat gccaaattta accaaaataa 840
taaaacacgt ttgccaacgc cagcagcggc gacacaacag caacaacca tgtccaatta 900
aagttgcagc agggaaaaaa aagaaaaaa atccggctgc cggctgctgc aattcagag 959

<210> 424

<211> 598

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (8)..(536)

<223> Area matching *Drosophila* EST AA950826.

<400> 424

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gattaaaatt tctgctacaa aaataaatat atatgtaacg catattgtaa atgttctaag 120
ttaagtgaca taaatcaaat atttgtgtaa agtttaatat tttaatacgc gtcgaagtac 180
aacgagtgag gctacagaag agcacacact aaagtgggtg acttggcgag cgcaaataac 240
ggaaatcaaa ttcgaaataa acgtgcgca atagacgggtg gtgtacataa gagtttaaca 300
aaatccgaat cagaatcagt tgaaagtgtg atttttttga gcctttgtct ggtaagtga 360

gagaaagctt taagcggaat tacatctata tatatatata taaatatata aatacgaagc 420
cagcccgctg ccattttgga aaggggattt tacaaaacac acacacacac atatataac 480
acagctgcga acacatccac atataacccc aaataaaatc cgaagaaaag agcataaaaa 540
aaacgcaaaa caaaccaatt tcgcaacttt ttaagtgaac cttccaatca ggcacttt 598

<210> 425

<211> 517

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (48)..(150)

<223> Area matching *Drosophila* EST AA949934. This EST
has sequence similarity to mammalian Casein kinase
genes.

<400> 425

tttgcgccgg agtcacttg atttttgatc gcttggcgcg gcagttgtca ttccgtctcc 60
tcctccgccg tatcattgtt ttgcaatcg cagctctctc gcaaactctg gctgcgggtg 120
tgcagtacat atacttgtga gaacttgtgg tgtgttatac gcgttaatcg ctttatcgct 180
gtgacgttga ataaattgtg ttgctccag tttccttttg aaataaattt caatgcagtg 240
cagccacggt ttttattcgc ttgctgtgt gtgtgtgtta aaagttggac aaaaaaatg 300
gcctggaaca taacagaaaa gagttgtggc tgtcaaactg ttgctaaaca cctcttatct 360
caatcttttt tgacttgaca gtctgccac aactggaaaa ttatctatcc tctcttctcg 420
ctctgttgtg tatgtgtgtg ttttgtgtat cttctacttt tttgagtcag ctggctgtgc 480
tttacttttt catctcctgc acagctttaa cgagttt 517

<210> 426

<211> 582

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (411)..(582)

<223> Area matching *Drosophila* EST AI109292.

<400> 426

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actcaaacca aaatagttgc aacagttgcc attcgcagcg aatcgtccaa acagctgact 60
ggaaccgtgg agcttacgtt ttgctttttt catcatagcc caaacagctg acgaatttta 120
actttactaa agtccttaa attttaactaa gccagggatt ataaatatatt ttctgatata 180
tctgtaaaaa ctttttttgaa aatcatttat tctgtaaata ttttcaaaat ctatctttta 240
taaattaatc aattacaagc tcttttttct ctttcagcta attttttget gtacctgcac 300
cattgggttca gaatactatg cgatctatcg ataacaacga tggcgagggg gaacaagttc 360
aagttcaaac agctgattcg atttgttttt aattttcatg tgatataacg aaacccaaac 420
aagtgaagcg ggcgaaagaa cacatccaag atggaccagc acagcccaat gttgtggcga 480
cctctgcttc tgctgcgcgg cctctacctc agtcaacgcc accagatgag ccactacgac 540
gcactgggat caagccgtca gtgcacgcag aacgaagatc ag 582
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<210> 427

<211> 709

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (1)..(279)

<223> Area matching *Drosophila* EST AA202259 (inverted).

THis EST forms a 1693bp EST contig with AA391736
and AA820861.

<400> 427

gtttaggtg ttttagttg ttgctgcgt aggaaacgtg tatttcttc tgcgccatgc 60
taaccctttc catataaacc tgatttaatc tttgattatt gtgctctgc tgggggatta 120
ttgctgccgt tcgttggtgc tggctttgct atttttgaaa attccactaa attatccgtt 180
gtgccgtccg ctgctctcc gccgttcttg tagttgttg tattgtgcgt tttgggcag 240
gtaaaacagt tcatttgct agggttgcc catcgttggg cgttccccag gaccacctgg 300
aatgcacata aaatgttaag ttttattgcc ctttttacag ttcctccaca tttacgactg 360
ccattgagtc gtaaaacacg tgaacaggta gcgatctatt caaggccaca gctgtttagg 420
aggttggcaa ccctggcggg caggagattt caaaacttcc agtggatatg ttctaactca 480
aggaattttt atagccgatt tgtttgaata aatgtacaat gtacataatg tctgcggcag 540
acgctgttaa ttataaatac aactgcggcc gcaagggaag tcatcaattt aaaaagctgc 600
tctgcattaa ttggtatcta atacctcttt tgctggtgag ctttggcaat tttccgtttc 660
aatcaaaca ttatataaaa gtgttcttcg agggacttat gaaaccgac 709

<210> 428

<211> 666

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (131)..(647)

<223> Area matching *Drosophila* EST AA142065. This EST
has sequence similarity to succinate semi aldehyde
dehydrogenase genes.

<400> 428

ggatggcgat agtctgccca gaggtggaga aaaatcgatt actcccgat atcgatgtct 60
ctatgatcgg tttcttgtca atttaaagcg attggttaaa ggtcccaatt aatcgaaagg 120
tgaggcgggc tattttaaaa aagggaatt atccattaac tttaggtaga ctttgtgcac 180

at ttattaat atagcggcgt gttattctac aattagacaa caataaacca atcgattct 240
agtggaagac agcgtatgaa agcagtgggg gtgatccctc catcggaactt cagtcgtact 300
tgagggttgc catgcaaagtg tacttgatgt ccacatagtc gtcaatgccg tgtttggaac 360
cctcccgtcc gacaccggac tccttgacgc caccaaagg agcctctgct gcggagatga 420
tgccttcgtt gacgccgacc atgccaaact ccagtcgctt ggccacccgg aacacctgct 480
gcagattctc gctgtagaag taaccggcca ggctctcct ggtgctgttt gccttcttta 540
ccgcttcttc ttcgtctcgg aacccgatg atggagacca ctggaccaa gacctcttcg 600
agtagagtgc gccgaagggtg gcacatctgt gacaattgtg ggtgcgtaga aaagggatcc 660
cttgtc 666

<210> 429

<211> 559

<212> DNA

<213> *Drosophila melanogaster*

<220>

<221> misc_feature

<222> (76)..(559)

<223> Area matching *Drosophila* EST AA536402.

<400> 429

cgctcgggta taaatgaaga gctatttctt tagccagct cagtaggttt tttttgttgt 60
tccgtgcggg tgctcatttc gcgtaattt agtgtaaatt cccatagctc ctagtggtga 120
ccagattgtg aacgttgtgc cagacgtctg ttaattagca tatagcacia cgaatatata 180
taccaaaaac ccggcaaaat tacaactcat ctccgacgca gtagccagtt ctttgttact 240
gctgctcggc caaataacgg taaatgtgga taacgggtgga taaatcactg ctgacctcga 300
cctagacaac aaatttgtac atagctatgt acattgtata aaccgaaagc gacaaaccga 360
tttcttgttg ccggctatgc attattgatt ttcaacatcc aattcgacag gagagcggtg 420
gacagggggg agtggagcgg agaaatcgag tgaatcagtg ccgcaacgta acggtaacct 480
ccgatccgg ccaccttaga ccagtcccat ccaaagtatg aaccgcccag aggaagggtg 540

tgcgcccaaa gaatccttc

559

<210> 430

<211> 599

<212> DNA

<213> *Drosophila melanogaster*

<400> 430

ctcgatgttc gacgacgctc agattcagat tcagtttctt ttcaccttc gtcggttgta 60
gatcgctgcc agcggaagca acggatacca agtcccagac acacaggcac caaatgcctt 120
ggaaaatatt tttgaaaaat tccaagtcac aatcgatagc gactaatgcg ttcgagccag 180
attaattagc cagaggtgaa aagtgcattg cgcggctaca gatactgatt ttgttttaaa 240
aatcgcacac ccaaaaccag ttaaaaaaaaa aaacacaagc gaaatatata ttttcgagtg 300
ccccagtgcc agtgcaaaaa taaaaataa agctatcgta aaataaatca aattttgtgc 360
aacgcgagaa tacacaaaag atatattcga ataaatacaa ctaataatat cgtgtcgtcg 420
ttgcgtcgcc cgttgacaaa agtgcaataa tcatatattt attacaacca attacatatt 480
ggtaatcaaa agtaataaaa tcgcaaatca aggcgaaata tttgcatgta catagcataa 540
gtgcggttgg aaaaatccaa aattgcaaga gttacgaaaa ccaaaacgaa aactggaaa 599

<210> 431

<211> 606

<212> DNA

<213> *Drosophila melanogaster*

<400> 431

gggcacacgt atgcatgtgt gtgtgtgtgt gtgtgatttg tgcacaggta gaggtgaacc 60
gtatctgtgt gcgtgcgagt cccttaggta agcaaagaaa atgtgcccaa ctccggtgaa 120
caggtagacc gctgctcaca tgccggttgt tgttcttggt gctcttggtt ttgctgctgc 180
tgttaaggcc gctcatgttg ctggtgtagc ctgcgatgtt gctagctgct gttattgttg 240
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gttgcccatg ttgctactga tacaactgtt actcgcattg gttgaatcac cactgttgct 360

cccactgctg ctgtttcggt tgctacattg tagctttctgc taatgatggt aactcttgct 420
tatgttgcat ttgtatgta tggtatgta tggatgatgc atctacaaaa gtgctgctta 480
tgttgcagtt gtctttgcta attgagatat tgtagcttat gctggtcatt atgttgctgt 540
aacaacactg ctggtattaa agataatggt gtgcattaag gtaaggttct tctgcatggt 600
ggtggt 606

<210> 432

<211> 169

<212> DNA

<213> *Drosophila melanogaster*

<400> 432

gtctagacca cataaacgcg tatcgatggc gacgaaatgt gtacatcgca catgaacgaa 60
cggggcgagt gagtatgtac agtttaagag agcgaggcaa tatgaaatat aaacaaataa 120
ttaactgaca tatccgtatg cttatcgcg c aacaaaccgc agcagcagc 169

<210> 433

<211> 585

<212> DNA

<213> *Drosophila melanogaster*

<400> 433

gtacacagca taacataatt tgctttctct cgcactccca ctcttacctg ctgagagcaa 60
cagccctgct gtctcgctca ttgcactcg ccagttgcct tctcgctccc ccagccaccc 120
actctcccgt tcggccgctt tcaccgctg catttgctgc gcgcctggta ttcggttcgg 180
ccaaaccgcc gttcgcttgt atgcgagtgg attattgttt ttgtttcgaa cgcgagtaaa 240
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gtttccactg cagccgagga gtttgggctt tagggctctg gcttagcctt ctcactctgc 360
ctcttgttta cagcttaatt tgctgcac accccgatgg ttccaccccc ttcatccac 420
gtgccgcata gccatacagg ctgacttcca taaatgggac atgcggaaag aactactatt 480

atacaatata aattataaat ataaatacat acaatgtatt ttaatgttgt atagaatatc 540
ttgatattaa agataagatg caaaaattaa aataataatt tataa 585

<210> 434

<211> 849

<212> DNA

<213> *Drosophila melanogaster*

<400> 434

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gtgtgtctaa aaatagacac aaatattgaa gttgattttt atacggccat cgtcagatac 120
ccctccccct cctgttacca tcccttgggt cgtttgggtg gttcgttggt gctatcaaac 180
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aaattagatt taattcatgt ttttgcctct cttcaacagg tccagtacat tacactgagc 420
aaatgtgaag aaaattcaca tattgtattc agcgatagaa ttatttttat atttagttcc 480
gtctatctct tctacttct cactagaca agtttttaaa aaatttgcg agcattttgc 540
aatatttggt ttctgttttt tttcgcgcca atatttttag cacctcttca atttttctct 600
gtcgtgcca ttttttggtt gttttcctac ttaacgccac gagctgtttt tctcagataa 660
aattcatagt gttggatgga ggtgggggtg gggggggggg tggggcatcc tggtgagtgc 720
aacattgttg cctcgtttga agtggctgtt taaccactg atggcccaga aggctaaaag 780
tgcataatgg aaagatttat cttaagactt gttatgactt ttaaaggcat tttcatagca 840
aacgaattc 849

<210> 435

<211> 585

<212> DNA

<213> *Drosophila melanogaster*

<400> 435

tccccaccct ttaaatttgc gggcttttgc tttgttttgc cggccgtggt tattggtggt 60
gttggtgctc ctattcgacc atctctcttt gcctttaata cccttacgaa gagtaactca 120
aaagtaaata aataaataaa ttaactactc ttgaaacata tccgttctag tgaaaaaatt 180
aaaattaatt ttaattcaat tatgaatgct cagaattata atgaggaaat cttcttggtt 240
ttgtagaaca tagctttact agtattataa catttcgaat ttcaattaaa agagtactta 300
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tcccgaaaaa attagcgcgt gtgcctcgaa atattttaaa tcgctaactg gcgtgtgtgt 480
gaataataat aataataata ataataataa taataataat aataaccata aaataggaaa 540
ggtacatttc caaagcaatt tacgctgccg cgggtataat tagaa 585

<210> 436

<211> 505

<212> DNA

<213> *Drosophila melanogaster*

<400> 436

acgcagacga cgaactcctc atgtgaccga gtaataaaat agcgacgttg cgcacaatgt 60
aaataaaaagt aaagtgtgaa ggcagctggt caaaggaggg gaaaaagaat aacaaaaagc 120
gaaaaagcaa accaaggcca cataacataa cataaaataa taataaaaat gccggccgct 180
ttaagcggct gatttctgtg cccttctatc cgccatctct gcattcttct ttctgtttccc 240
ccttttatta tcctcctcct cccccacaaa cacaaacaca cacacacaca caccgcgcgc 300
aaatttctat cgtcgcgtac tattttcgtc agtcagctgc tgctgagtec cgttacttac 360
ttcagtggcc ctctcgcttc ttttgccctc tccggtgctt cgttttcttt gagcacctcg 420
tgcaagctct catatgtttt tccgcgctct gctttccgcc gcttttcccc ccgttttaat 480
atgtattttg ataatactac cccaa 505

<210> 437

<211> 581

<212> DNA

<213> *Drosophila melanogaster*

<400> 437

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ttacgtttac gtttcacaca agctaaaaac taagagaaga gcgcatctcg taagaaatag 120
agtccacaag tgtctacaaa tttccagttg gcaatgcctt tgctggatgt aaagtgggtg 180
cactcttatac ggctaggtgg cgctctatct cgagagcgat agtcggggta ctacaaccga 240
accactgggt agacatatatc ggtgctgcca acttttgtca agaaaaaat cagttagggt 300
tgaaattttg caaaaaaaaaa aaatggggaa taaatatata aattataatt tagcaaaaaa 360
tttcatcatg tggtagctgc ttaggttaag gtatatcaaa taatatggaa aggtaattta 420
ccacaaaccc taattgattg caccatggta taatggcatt agtgagctat accaaaacga 480
gcaactttcg aaatccatca gtactggtga aaacaacaaa ccgaaagaaa tgagtcaagt 540
actacgcatac ctttactggc ttcccatttt gctgctgctg c 581

<210> 438

<211> 637

<212> DNA

<213> *Drosophila melanogaster*

<400> 438

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tgttcgctct cttgaaacaa taatttcctt atttctctg taaaatgaat acatgttttt 120
tacagttatt caaaattaaa atattttgta tcacaaacac ggagtaaatac gattatttta 180
agattaattt taaaaatggt gttttgcgcg catgttggtg aatttaattt cgcagctgaa 240
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tgttgcttgc gcgcctctta ttgaatttag tttcatagct gcttgctttt tactgggggg 480
ttggtttggg aaatttatca gctggtagcc gcgctggtaa aggtaacagc gcttgcgacg 540
gacattctct aacacagccg ggaaataaac atccagaata atttgagtgg gcttccacac 600
tggcaggcaa ataaccatca agaaaaagg atttaaa 637

<210> 439

<211> 563

<212> DNA

<213> *Drosophila melanogaster*

<400> 439

gaaagagccc tatctctggt tgacttggtt ttgtttggta ttctttactt gatttcatac 60
ccgtcacacg aacattacgt agggatatatt ggttttgcgt aagagagaaa gatgtcatga 120
ttgatcatta aatcaatca gattaatgct cgctaataaa atgtaatcag caattatcaa 180
agtgaagaaa gtttaagcca agctctcgaa atcaagtcct taaaaattta gtggtattaa 240
aatgtgctac tcttcagttt ctaaattggct ttgttaaaaa ataactaatg cactttttta 300
cactcttgcc acattaagtt ttcagtgaac gaagaaagct gattctaaat tgcagtaac 360
gagcgggtat cactttgggc taggctaccg acagaagcgt tcattcttgt tttttattat 420
tattattatt acgttttttt ttgcccactc aacacgtttt ctggttcttt ctttgggtgt 480
atgggtgtgt gcttgagcat gcgggcgcac ttgtgccacg tacacaaaaa cacaatcatg 540
cccacgagga aggtcatttg aag 563

<210> 440

<211> 662

<212> DNA

<213> *Drosophila melanogaster*

<400> 440

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ctgggtttggc gttcacctcg ttcatttttg cactaaacgc ggcaagatgt tgaagtcatt 120
ttgatttctt cgagtgtagc caaatcaaaa taaatcgta acaggggtatc aggaagttaa 180
agcatgtaag ttactaaact caatataaca atgtgcagtt acgctatcac gtaaaaaacgc 240
aacaactca acataacccc actttcgata gtaaaaaacta taactataaa gttatgagca 300
taaattaata ggtagcagtt aattttctct ttctcccat attcgcattt ttcgtcacgc 360

acttttttcc cttgcacgaa tatttatcgt cgctttgctt tgtcttttcg ctacaatcgt 420
gtagttattg ttgcgttcgg aaagcgacga acgcttaata ctaccaacaa caagaacaat 480
aacaacggag tagatacaca ccaaaccgaa cacaaaaaaa agtaaaaaaa aaaaacaaaa 540
atgttggtct tgagttatga tgttcctatc atcctttgac tatggaacat ccataactcaa 600
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tc 662

<210> 441

<211> 496

<212> DNA

<213> *Drosophila melanogaster*

<400> 441

acatgtacta tatactatat atatatatgt atgtgagcgg cggcattaag tcattaagaa 60
tgtgcgacac ataaacggcc ggggaacctg atgcccattn natcgtatta tcgcattgcc 120
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gcttgatgat cgattaagcg ttttcacacc tttcccagtc acgtcgcatt cgcagggttat 420
ctgtatggat atgggtacat gcatatgaag catacgacat ggtgcccctt tccccgctgg 480
gttatttata aaaagt 496

<210> 442

<211> 559

<212> DNA

<213> *Drosophila melanogaster*

<400> 442

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ctattccaat tggagtcgaa attttaatcg ctctgcgctg attcatacac ctgccgctaa 180
ttggtcgcct ccattttaca cctgaatttc gctttgtttg aaatttaagt ttttccctct 240
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aatttttcca tttcaatttt tacttagttt ttgcaaccag gtttttggcc aggcgcattg 360
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gtactacatt tttttaattt ttggctttta ttatcaataa tttgcatata aaatagaaat 480
tttcaatgaa aatgtgacta ttaggtagaa ttacttccg gttggaacaa tacctattgg 540
atggetcaat ttgctaattg 559

<210> 443

<211> 397

<212> DNA

<213> *Drosophila melanogaster*

<400> 443

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tctgtgcgag tgtgtgcgag atgatctcta ctttttccct ctctttttgg ttctcgctga 180
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tttgatacgc ggaattatca acctgctttc gttggcgctg ttaaaaaaca aaaacagtaa 300
aatccagtt tggcttactc gaaaattatg cgaatatctg ggatgtaaag agcttaaagc 360
ctgaaaaaaaa tgaaactttt ccattaccca tgaattc 397

<210> 444

<211> 470

<212> DNA

<213> *Drosophila melanogaster*

<400> 444

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tgagacacct agggatcaag gtctagaata cataactgtt tacgtccttt ttgttctaga 180
aatctctagt ttagtgaccg caaacattac ttttttgcag gaccatttta tgaacgggtca 240
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gggacaatcg ataaaggtat cgatgatttt tttttgcaaa attacaatcc ttgaaatgta 360
cctttattag gtactatata tcgtatacac attgtaccaa taaagtacag caatatgatt 420
aaactttttt ttttataaaa tacttggttt gccaaaggcg ttgcactttg 470

<210> 445

<211> 182

<212> DNA

<213> *Drosophila melanogaster*

<400> 445

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caactgaacc gaactgaaca gaaaccaaca cacaacaaaa taacacgaca aaacataaag 120
aaaccgaaca caaaacccca gcagaaaagg caaaaaagct gaaaaagagt cgctgagaat 180
tc 182

<210> 446

<211> 370

<212> DNA

<213> *Drosophila melanogaster*

<400> 446

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ctgctgcaca tttctaaaac aaaaatataa aaataaagat ataaaatata taaaataaaa 180
aataaaaaat ttctaaaata ataaaataat aatgaaatga tttaattctt tacgaaactg 240
ttgtcagcag tattattaca ttattattga taaagggttaa gtttcttcag catattatcc 300
acctcactcg tagacatgga aaacacatgg ataattcctg ggaaatgccc gtgtcacgta 360

gaagacatat

370

<210> 447

<211> 435

<212> DNA

<213> *Drosophila melanogaster*

<400> 447

gtcgaaacga acgaactctg gaacgctgtc gcagaggttc gatggagcag ttttgagcag 60
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tcagcaccta cctgatccca ccgattccac aatgattgta cacacctcag tgggttccca 300
agctcgtcgg cggaatgacg tctcccttcg acggcattgc ctgcttctgg ctgtcactag 360
tctggattca actgggtatc atcaatgccg gcctggagtt cctcaaggat ttcgtacccc 420
ttcagctggg gccgg 435

<210> 448

<211> 235

<212> DNA

<213> *Drosophila melanogaster*

<400> 448

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aatgcaacat atatcgcaac gcgatgggtt taaatttaat gttatgattt ttatattaaa 120
aaataaatat ttttttacac cagttattat gccaaatctt ttaaattgtat acaaattagt 180
aatatttaag gaacagaaac cattgttaac tattttactt gtcaaagccg aattc 235

<210> 449

<211> 328

<212> DNA

<213> *Drosophila melanogaster*

<400> 449

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agagggagat acatgtatgt aaaaaaaaaa aaaggaaagg caaataatac tgtttatcaa 120
gtgatgaaaa gcatttaaaa tgtcgagtat gccagggtatt gtgtttaaat gcatgccctt 180
cgtcgcattt cggttggaat gcatctgata ttggtaagga gaatgttcaa aagacataag 240
ctgaatgctg ttaataattt taaaaatatt taagcaataa atgcatatat tgcataatgg 300
cattaaaaca aaaggcaata cagaattc 328

<210> 450

<211> 110

<212> DNA

<213> *Drosophila melanogaster*

<400> 450

ggccaaccgc tctgggcccg gttttaattg ttcgggctgt ctgacaaatt tcagtttcgg 60
tttcagtgac tgcccttgcg gcaagctgaa gctgatttcc ttgcgaattc 110

<210> 451

<211> 472

<212> DNA

<213> *Drosophila melanogaster*

<400> 451

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cttttcggcc tagcacagtg ggccaaaatg tattcatcct gccagctcac ttccagtcgg 120
tcttcacgct caccgatggc actttcgaac ttcccgaac atgtggagtc tctttgatat 180
cctgctctct taaggcaagc atttaatggc catctgttgg catccttacg aagccacaac 240
tctttgcccc gctttgcaga actcaacact tgccaatagt gctattttgt accactcaaa 300

agggtaaact acagcgttta ttcttttggg ttgtatttat attctccttt aagcaaacaat 360
ttacacattc gttgtatggt ggtgctaaat tattaagtgg agatactgga atactctctt 420
actaccatgc ggcacattta ttagctttaa tgggttggtt tctgacagtt tt 472

<210> 452

<211> 790

<212> DNA

<213> *Drosophila melanogaster*

<400> 452

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cagcagcagc agcagcaaca gcaacatcaa cgcagcggca gcaacatcac cgcaacagca 120
acagcttcga gtcgcgtgtg tgcgttcattg tgaggttggtg ttggcaactt cgttgcgtgt 180
gtaacaggcg cccagatttt cgcagagagc tgaaaaagaa catttccaca tgcggagtgg 240
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ccggtgtagt tgccttataa acgagcctaa aaatgcgaga taaagagcgc ttcgcacgaa 480
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ctttaccatc agctcaaatt cctttgcgca ttcctacgac gttgatgtcg ctgcctgttt 660
ccggtgtcac ttccttattt agttgttcac gtttgtttgt tgttttgtgc tgttgggtgg 720
gatttcgctg gatttcgtcc ttgtaggctc aaccaattt aacagccatc agaaagtggg 780
cagcgaattc 790

<210> 453

<211> 404

<212> DNA

<213> *Drosophila melanogaster*

<400> 453

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gacgcggcca agaaagacgc tggaagagcg aaacaagctt ttcgtgtttt ttctattcct 120
tttgttccgt ttgttttttg gggaggatta catcaagttg gagctgccac atagcgcaac 180
aaaatgccgg gacagtcagc tggtagcacc tgcgtgtatc gataaatcga tagttcctgt 240
tttaaagccc tgtcgacggg acgtaacaaa atattagacg tcagtggcag tggatttcga 300
ggattttaaa atgctttccg tcaatttctt caacatcatc ccaatgtgtc tgcgcgactt 360
ttggtatgac tcgtcaagcg cgccggcctt tatagtccgc caaa 404

<210> 454

<211> 563

<212> DNA

<213> *Drosophila melanogaster*

<400> 454

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ttacctacca aaccaacttt ccaccgaaac atgcggcaaa tcgcatgatg caagacgcct 120
caaacatttc gctagccaaa gaagtttgag aagtttacga ttgtgtgcca aaaataaagc 180
acgtgcggtc gcctaagaga gagtcgcgc aatctcttaa gttagtttct ctttcgcctt 240
agtcattgac cttttggttg ggtcctaaat atgtgcgcac tttgtcgaaa tctttagcca 300
ctttgttgtc actgactaat cctatgtgcc aaaagacatt agctcaatga tttgtttagg 360
cctttaattg cacctgattt aacggctttg tgggacaaat actgcaagtg aaacttgcca 420
caaactatth gtgtgcacaa taattgtaac aagggttaa gtcacattgt ggtaacacgg 480
aataaaaagc ttctgatagg agagatgacc gtaaactaaa tacatacaat aatatcgtcg 540
atgcaatagc taatatatga tat 563

<210> 455

<211> 518

<212> DNA

<213> *Drosophila melanogaster*

<400> 455

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gtgtagttta tatgcccaaa agttgtcaac tgtcaaatca cgaaagagaa ggagaagagc 120
cacatacccg agtcgtaatc gaaaagaaaa tcgagaaaac aaattggaat acttttcgaa 180
acgagtcgcg tgtcaacgta aatactttat atgtttgcaa agtgcggtgtg tccatataca 240
aatgggtgaa tcggtgcact gaaagaaaat gtatatcttc tagttatgtc tgaaattaac 300
gtgctatttc agatcataga tggtccttat aaacatgtta ctcatTTTgc atacttagaa 360
gattgtatat tttttggtcg gtgcacctgc ggcagcctta aatcgcaatc ggaatgcaca 420
tttaaagcaa aatcgacttt taaatccggg ctcgttaatt atcacgccta gctggcaaac 480
caaaactaac attcaagtcg agaaatccac gaatcatt 518

<210> 456

<211> 324

<212> DNA

<213> *Drosophila melanogaster*

<400> 456

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atgttttttg ttgatatcga tgctttgctg aaccagctgt ttaattatac accgttcaca 120
caaccgcttt ttggttccat gtgaattatt taaatcgttt tagatttaaa taaaagtttt 180
tgtgtgtgtt cttttttatt tcttttactc ctattttcag tcagtttctt cttattatca 240
tatatcatcg tatattttatt tatttgtata tgctgatact tatcattgaa tgaatcatat 300
cttaaagctt ataaatgaaa aaat 324

<210> 457

<211> 325

<212> DNA

<213> *Drosophila melanogaster*

<400> 457

gtcgttatgg gttattatgt gatgtacaac gtgtaagtgt gcgtgcctca agcacttgac 60
ctcgccatca atgatcgag aaggtgggtc ggttaaattg gtgaccaga tgcagtggaa 120
gcaatcagga agagaaagga tttgtctccg gaacaaagca aatttttgat gacgtgccta 180
ttggcgaagt caaccgcga cgcaccac ccactcaaag aaattggggc aatcaaggca 240
tatgtagtgc ccataacacg gttaccaatc acttatcacc ttcccagagc acagttttca 300
ttgcattgaa gttcctcggc agcat 325

<210> 458

<211> 524

<212> DNA

<213> *Drosophila melanogaster*

<400> 458

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cagctgtaa cgaaactccc acgctgccgc ctctgttget gcgtgctac tgcgtgccg 120
gcatcgtgt tttgttgac atttttgtgc ggcttccttc gatttttgtt gctgtcatcg 180
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acgcaaacct ataacttga atggaaagt taattactta ttattccaat actcgtcacg 480
tatctgattt agagatatct tatcttttta atacttaaatt attt 524

<210> 459

<211> 571

<212> DNA

<213> *Drosophila melanogaster*

<400> 459

cgtggggtga caaagagagt gcccagaggga gagagtaaac gagtgcgaga gagagagaga 60
gagagagaga gagagaggag tccgcgagaa agcgcacga agtatgctct tgttttgtgc 120

tctcattttc accttttgcg ttgtctcatc ttaacttttc acttgtgttt gtgttgccag 180
gcgagctttt ttcttaagaa ggagaaagga gaaacgagaa ttaagcgaag gtaaagagat 240
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tataccatat acttttatat atttttcatt tttttttcac acttatatag attatgagag 480
ctgactatta ttttaaccat tgctggtgaa gccacaaaat tggcatggta actttcatct 540
tcataaccac attatccagc ttaattgtgc c 571

<210> 460

<211> 455

<212> DNA

<213> *Drosophila melanogaster*

<400> 460

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tgtggttcct aggcgatact ttctggcgc cagcttaaaa aatttaaatac tttaatttaa 120
aaaatttcca ggcaaatac ctagttttta taggcaacta agcggaatct aaagccattt 180
aactgccaat ttgtatacca tatgtattgg actgcaatga atttagtagc aaataaacia 240
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atttttcaca gtaatggggg agatttgctt tcagaaagcg tcgaactcct tcttttctaa 420
gggcttaaag aaatgtgtcc cgagaagggg cgatt 455

<210> 461

<211> 106

<212> DNA

<213> *Drosophila melanogaster*

<400> 461

ccttgaacca atctacaata tcttcacnat cataatgatc atccctttta acgcatcatc 60
cgattttcaaa gcaaatacag aaataaaactc aggccagatc ggtttg 106

<210> 462

<211> 51

<212> DNA

<213> *Drosophila melanogaster*

<400> 462

ctccagatac tttttgaaca ctgaagaaaa cgcgagttg tgggtgaatt c 51

<210> 463

<211> 79

<212> DNA

<213> *Drosophila melanogaster*

<400> 463

cgtagggcggc accagaatac gagagagaga gcacttccag cgcattccagg cacatagttc 60
cgtagctca gttgaattc 79

<210> 464

<211> 470

<212> DNA

<213> *Drosophila melanogaster*

<400> 464

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<210> 465

<211> 507

<212> DNA

<213> *Drosophila melanogaster*

<400> 465

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tccccaatth ggtaagtatg gtacatatat actggaatag taagggttaag ggaactctaa 480
tccggatgtc caaagctttc cttaggg 507

<210> 466

<211> 260

<212> DNA

<213> *Drosophila melanogaster*

<400> 466

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attaacctgc aaatcgtgac aaatcgggac atcggaaatc gaatatactc tgaaatcact 120
ggaaacattg aattgaaaca aatatgcat aaatttaaca aaaaaaaaaa tgcgcaagggt 180
gcctatgccg gggggcatcc ttgatccaat gagaattact tttagaactt tacgaaatat 240

gaaatgaccc ttaattaatc

260

<210> 467

<211> 534

<212> DNA

<213> *Drosophila melanogaster*

<400> 467

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ctgcgattgc gtgtgtatac aaatgtggtg ctctcttttg ttggcgctct atttgaatt 120
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<210> 468

<211> 615

<212> DNA

<213> *Drosophila melanogaster*

<400> 468

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cagcacgttt atacg 615

<210> 469

<211> 27

<212> DNA

<213> *Drosophila melanogaster*

<400> 469

gttcgggttg agttagagca tgaattc 27

<210> 470

<211> 551

<212> DNA

<213> *Drosophila melanogaster*

<400> 470

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cataaacgtg gcttccaatg ggcccagtc ccattacggt catttcgtgc gtgcaacgaa 540
accagtgtga a 551

<210> 471

<211> 465

<212> DNA

<213> *Drosophila melanogaster*

<400> 471

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tgcacaaaag gcacagactt taaaagataa ataaagcaaa attacaaagt ttagggtttt 240
tgacccttaa ttggaactac ttttcccca gtgtgtgggc cggcagagag ggagagcaca 300
aagcaaatg caacggaagc aactcatcgt ggcacaatgg gcagactttg tccgagggct 360
ctccaccggc acctcacccc actacacaac tgcgccctt ccaccctcct cttcgacaag 420
ccgaagtttt tgccgtgaca cttcattttt attttccgac cttgg 465
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<210> 472

<211> 215

<212> DNA

<213> *Drosophila melanogaster*

<400> 472

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ttttgagatc gaaacatatg tatcaatcga gcggccgtgc gtgctgctga agtcgaagaa 60
aaaatcacgg gaaatcacgc cacttcggtt aaaacagccg gcaaaatata atgagttaat 120
atttgttttt ttccgttggtg tttggcggtat aagaaaatcg cggcatgagg gatgctgaag 180
tgattgagtg cggcgcaacta atgtgcagcg aattc 215
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<210> 473

<211> 412

<212> DNA

<213> *Drosophila melanogaster*

<400> 473

gtggggaata ttaatagatt cacgtcggct atgaacagaa ataggtgccc aaatatatac 60
gtattacatt ttaggcgaag atagcgtggg cttacgatgt tttccaaata tacatatata 120
ttcccctata aatcttatct aaatcaccta ctctgcttcc atttatgtct atcattcaat 180
ctctaaaggt ttaatcctta cagctgataa gtacagttta attggaggcg taagtataca 240
gtgcttactt gattagtgtt caaactaatc cctcttaggt taggtcatta actctcacta 300
atccttcgac tattttaaact accgcgatca aacacaaaca cgaagacctc aagtggtcga 360
ggctgccgtt ttggctatct ctggcacttc atgcacttca atctatgaca cg 412

<210> 474

<211> 559

<212> DNA

<213> *Drosophila melanogaster*

<400> 474

ggcgaatgct aaacaaaatg agagagcggg atgaaagctg tctcttggag agcattttcc 60
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tgtaactgcc ttttgtagaa cgtaaaacaa aacattctgc aggacgtaca aaatgtatgt 180
atttaataag acaaagagtc tattatttat gatattctata atataaaaca aatgatgtta 240
caatcaaatt aaaaatattt tatttacttt cgtttttatat ttaagccaa ataataataa 300
aagtaattaa aatgtagata ttaaaataaa aatttaaate gattcgggtgc acacttttgg 360
taaaatgtag aaaccttcat atggatttcc attaatccct ttcgatactt ttaacactg 420
gtgatagct tacagccaaa ctggttcaag caaggaaccg aacctcaaca cttttttaag 480
ctcccacttg gtgactttga aatagtaaac atgggttttta tcagctaata tcagatcgtg 540
ccaatctatc aattaccca 559

<210> 475

<211> 474

<212> DNA

<213> *Drosophila melanogaster*

<400> 475

ggccactcgc tcgctgtctc tttctctctc cctcacggat actcgcgatt ttccgcgact 60
ttgaaattcc gtatacgtcc gttccgttcg tcggtcgaag ctattctgag cggtagggcg 120
cttttgaaca catcggaaaa gttgaaaatt ttgagattta tttatagaga gaacggggcag 180
tgttttgatc tctttgctga tttccaaagg tctctttgaa tataattaat caatgggtta 240
atcagcccta tagtggattt cttattgaaa aataataatt aaaattcaat cactatgtaa 300
ttaaatgtat ttttacaatt tatgagataa aaattgggtg tacaggttca tacccaattt 360
ctaactcata aattattatt cgaataaacg cacctcaaaa tagtttttga aaaagcccg 420
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<210> 476

<211> 849

<212> DNA

<213> *Drosophila melanogaster*

<400> 476

actccggcgc tttctcgtc tcacacacaa tcaacgggtca tgcgttcgta tcgcttcggt 60
gtgtgtctaa aaatagacac aaatattgaa gttgattttt atacggccat cgtcagatac 120
ccctccccct cctgttacca tcccttgggt cgtttgggtg gttcgttggt gctatcaaac 180
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gtctatctct tctacttct cacgtagaca agtttttaaa aaatttgccg agcattttgc 540
aatatttggt ttctgttttt tttcgcgcca atatttttag cacctcttca attttctct 600
gtcgtgcca ttttttggtt gtttttctac ttaacgccac gagctgtttt tctcagataa 660
aattcatagt gttggatgga ggtgggggtg gggggggggg tggggcatcc tgggtgagtgc 720
aacattgttg ctcgtttga agtgggtgtt taaccactg atggcccaga aggctaaaag 780
tgcataatgg aaagatttat cttaagactt gttatgactt ttaaaggcat tttcatagca 840

aacgaattc

849

<210> 477

<211> 157

<212> DNA

<213> *Drosophila melanogaster*

<400> 477

ctcaggccat tcaacttctt ctgcagtaag gaaatctcag cgggcggcag cttaagaacg 60
ttccttttga gccggatggt tagctgctgg cgtatggcat caaatatctt gccggcctgg 120
ttttgatagc tacgcagctt cttgcgtccc agaattc 157

<210> 478

<211> 94

<212> DNA

<213> *Drosophila melanogaster*

<400> 478

atacagaaca tgtaccagca gctctcacac accacccgcc cgcccccttg gcggtatcga 60
tatataaata ttttctatgt gtgcgtctga attc 94

<210> 479

<211> 485

<212> DNA

<213> *Drosophila melanogaster*

<400> 479

gaatgaacat atctcaccca gtgaaaccgc tccaccttcg ctcagcgtg cgtcggcggc 60
gactgcgcag tcggcgggca gcagcggcag tggggaaaaa agtgaattta tttcatgcac 120
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ctagtgcacc cggatttctg gtggacaggg gcaggaagtg cagagttgcg tgggcgcatt 240
aggtgtgtta gggtagacagg ttttgatatg gatgccacaa atcggatcgt cacctttgtg 300
cgacacttgt tgcttcgctt tggctattta tttttatttt ttctttgaaa aatgacacaa 360
accctgtgtc cttgttaaaa atgtgcgctt gcctttggaa ataaatgttt ccgccataga 420
aaatgtattt gaaataattt ttgtgcacgc cattcgagac ttccataaat acaaagagga 480
atggg 485

<210> 480

<211> 1145

<212> DNA

<213> *Drosophila melanogaster*

<400> 480

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tgttgaaata gttttgaaag ttttactaat aatctttata gttattaaga taattgagaa 120
aagcgtctaat gaaaacaatt cttaaaaaca aaatattaaa tcgatccctt taagatttat 180
ttaatatggt cccttcctat taactaagat tttttccata aataaataag ttgtagaaac 240
agtaatgctg cattaccaca gtaaaattta aaactatttt caatgcttta tctcttaata 300
gtttgaaaaa aaaactgcc aatagatctac tttacttact aactcaaaat gatttttctt 360
atattttgat tacgttttagt atacctcagt aaaatcaaaa tagtgggtac tagaaaaaaa 420
caacaacaaa accgctctct gacgtcgttg cgtctgtctg gcgtctcgca cacagccata 480
caaaatacgt gcacatatgt atgagagaga tttctgcat tgctctttgg attcgtgttg 540
ttgctgttgt aattgcaagt gatcgtaac cggcgcatta cactccggcg ctctctcgt 600
ctcacacaca atcaacggtc atgcgttcgt atcgcttcgt tgtgtgtcta aaaatagaca 660
caaatattga agttgatttt tatacggcca tcgtcagata cccctcccc ctctgttac 720
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atgaaataaa ttagattaat tcatggtttt gcctctcttc aacatgccca agtacattac 1020
actgagcaaa atgtattcaa cgatagaaat atttttatat ttaagttccg ctatctcttt 1080

ctactctcac gtagacaagt tttaaaaaat tgcgcacatt tgcaaaattg gtttctgggt 1140
ttttc 1145

<210> 481

<211> 232

<212> DNA

<213> *Drosophila melanogaster*

<400> 481

cttggcacat aaggaaatat ggcacatgga gttctatgta aaaagctatt tagatcgcca 60
aataaaaacgt ggaatttgtg ggaaacactt ttataatact ttttgtatgt ataagagtta 120
taataagcat aatgagaaca tggcataata cgagacttaa gccacatgat gtactatgta 180
catacataga aatgtgtgta tgtacctaca taacataatt ttaaacgaat tc 232

<210> 482

<211> 522

<212> DNA

<213> *Drosophila melanogaster*

<400> 482

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cggacgtttt gagcgcgtgt gccgtgccgc agataacgaa acattcgcag tgctatcacc 120
agaattgaaa acagaatcgc atcaaataca ttatacttca cagttgaatg acgagaaatc 180
agaaaaaaat attccccgc ctttctaaag aaatcaaaat cacaagttta taagtgccaa 240
aacaaaaatc aataccgatc gcatacaatg cagcgcccca aaaagtgtc aaaactgtgc 300
tgaacaaata ttatacaaaa aaataataaa taagcaaaac aaacaacaga aaatctatat 360
ttaatctatt ctatatctat gtgtaatcga atcgaaatgg gcagtcgaac aaattgataa 420
aatggcagct aaagccggag aagctacaaa taaatggatt aagcccagca gggtgagtta 480
tcaaaagcga cgccgcatta cggtagcccc acaaatgaaa ta 522

<210> 483

<211> 325

<212> DNA

<213> *Drosophila melanogaster*

<400> 483

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gtctaataag atcaccgcag cgcagagcaa catttaaaag ctttggccaa caaaaagcga 60
attgcgtaca gttgtgcaac ggcgaacatt cgattcgatt cgattcgatt ggtttggatt 120
ggattggatc ggattgtaac cgcaggcggg acagagggcc gcagcaaaaag aatcgggtcat 180
aaaccgcaca tgtagttatc gagatatttc ggggaaatgc ctggcgccaa gtgtgggaaa 240
tcaacggaaa catttgtgat tcgaagcggg gtggatttga ccggtgctat agaaacgggg 300
gttaaaacta atgattttta atttg                                     325
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<210> 484

<211> 426

<212> DNA

<213> *Drosophila melanogaster*

<400> 484

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ggtcaaccag agagagagag ggagcgggag agggagaggg agaggcagag gaagttttgc 60
gaagagagcg agtgagggtc acggaaaata attgattgat ctaatctatc ccatgaaaat 120
ctgggtataat tctactttta aatgagagct ttgttttaga gttcgaatcg attgttttat 180
tgcttagggt tttggtaaga atatcatatt ttatgagggt atgtggtaat ctcggttaa 240
gtgggtgaagg cttcacatta aaatctctat tgatccgtta actatcttaa attactatct 300
taatattttt tactttcata attacatata ttttttataa attaccgttt cccaattgga 360
aaattatttg gttggatatg atgggccgcc cggggccggc gtgcaaatca tttttcgcat 420
catataa                                                         426
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<210> 485

<211> 527

<212> DNA

<213> *Drosophila melanogaster*

<400> 485

ggctggattt agagttcggg tcttcgggca tatatcgccg acggcagacg gactagacgc 60
ccaacaactg acaccacccc ttcagtctgg cgattccacg ttcagtcgcc tggatattgc 120
tacttttggt gttgtcgctc tgcttgctgt ttgtttttca cgtcttgccg caacgccage 180
gtcgactgog ggcgcccttg cggagcagag ctgattgtct ggctattttc tggctatcaa 240
ttacaagcca ggtacaaatt ctcaatggaa aatgtttcca gaaagtatgc tattatttat 300
tattattttct gctatcaaac gaaatatgta tgattgctac tgtaagatta atttgtggca 360
taaatttagt ataagtacaa acaataatag agatctctct attaagcgga caacataagt 420
cgtgtattta atactattag acttacgtcc aaagaagcta taagcgcac actattgtgg 480
caaatgaat ttgccttaga ggattattca gctagcacca caacact 527

<210> 486

<211> 504

<212> DNA

<213> *Drosophila melanogaster*

<400> 486

catccgattg tttacggccc tcagcggaga gcaactagt ggtggccact tcaaateggg 60
gatgccgggt tagctattaa atagttatgt ttaacattta ccagtggtea tttcagtcag 120
aaactactgg agtgtggcac agaaagtgta aaagtatgca taacatatta aatataaatt 180
gtgaagccta cggtttacia taaatacaat acctgccact ataaactata gccatttgtg 240
tatggatatc cagagagaga agacgcaata agatgagcaa cagaggtatg gaaactaaga 300
gcacaagaaa gagagacaca ccaccgtgat acggtttgtt gtggaacgca aaggggtatt 360
cgatcgtttg tggagcgcac tgcgtttgtt tgtggttcgc aattgtctta gcccgcgaga 420
atatttatta ttaatttatg gcattttatt atgtacccgc ttgttggcta ataagcaatg 480
tgtttactta agcttttgag tgta 504

<210> 487

<211> 584

<212> DNA

<213> *Drosophila melanogaster*

<400> 487

ctttgaacca ttgcttttgg ttcgcttatg aactgactgt attttttcaa cgtagtgctg 60
ttttattttc gttgttgatt cgttctttgc tcagttcgtg cgcttatctt gaacttttget 120
ttgatgcgcc attcgcatgt actggcgaga gcagcctagt gtgagtgtgc atttaaattgg 180
ctccccaatg agagcatcat tttgtggccc tctttttgtt cagatcttcc ttttgetect 240
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tattaatagc gcagcgccac tccgcggtg tgttagtgcg ccagagtgcg aaagtaacag 480
taaaaaacta aatattaatt cgcgttgatt ccgattcgta ttgcaagttg ttcaaaaccg 540
agtgcctagt atatttgcaa aaaattaaca tattttccgc tggc 584

<210> 488

<211> 439

<212> DNA

<213> *Drosophila melanogaster*

<400> 488

gtgtgggtgt gagccgcctt tgccaggaaa actaacaaga aaaaattccc tggcgtaaa 60
atttgcacaa aaaatgttga atcagttcga ttttcaatag aacactcacc cattaatata 120
ccattgtagg aggggggtata ttgatttccg tcagaagctt gcaacgggga agggaaacgt 180
ttgcgatcat ataaagtaca tatatatatt ttggataagt ataaactgcc aagacgattt 240
agccaggtct ctccttttat tcgtccgtcc gtatctaagc aagctagtca tgaagttggt 300
aagttatctg gataagtcaa tcaaagtgtt gtttctactg caggaagtat gtatataata 360
agtatatcgg acatgtacat cggaatatta tgacaaaaaa gtactttcat tatatataat 420
tcatttttagt tttttgacc 439

<210> 489

<211> 118

<212> DNA

<213> *Drosophila melanogaster*

<400> 489

gttacgatca agacctagag ccgagccaga aaaaggtata ctgcagagac agagaggagg 60
gcacagtgc agagagcgaa taccggaaag aaacattcaa gcaataatca cggaattc 118

<210> 490

<211> 352

<212> DNA

<213> *Drosophila melanogaster*

<400> 490

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ggtgtgcaga ctgtgctcag tcgatatttt tgaagttgct gtactttgcc gtcgcgtcgc 120
agtagttgtc tcgctcgtc cgcagccatt ctgcttgcgc cagcgtttat ttctgtacac 180
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aacagtttgg cacgggttat aaatacgtat ttattagtaa aataaataag ttgctcagtt 300
ctttagacga aactatggat tttattttaa tattgaatag gatgagaatt cc 352

<210> 491

<211> 333

<212> DNA

<213> *Drosophila melanogaster*

<400> 491

ggccaaccaa gctgggttgc cccctatctg tgtgcctctg ctgttcgctg gtgttggtgc 60
gctgtccgtg tattggtggc tctacagctg agcccgacac acttaccctg tttctgcctc 120

tttctgctgc tgcgcatgtg caagagagggc tcttcggatg ctctatccaa atcgaaagta 180
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ggctaaatag ctaggacatt ttacagtct atctctttgt gaaaaccttt ttatcaaggt 300
ctttaaaaag taagtgcatt taagcccgaa ttc 333

<210> 492

<211> 91

<212> DNA

<213> *Drosophila melanogaster*

<400> 492

tttcgtactt tgttttagcgc agtgtgacca gccgcaagtc gggatgaata acgtacaatg 60
tcgtacaaat accgaagaca atattgaatt c 91

<210> 493

<211> 426

<212> DNA

<213> *Drosophila melanogaster*

<400> 493

ggacagctgc atacaaatgt tttgctctgc tcttcccttg tgttgctatc tttttctctc 60
ttccactctt tttgctcctt cttatttccg gtatttaaac tttgcgcatg cgcattctct 120
tctaactgaa aaaaaaccgg tcgctctctt tttctttcat ctctctttgc ggtttttggt 180
gacattttga tgcacttccc actcaagctc acacatacac acacacataa aactacgctt 240
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attcgattta cttctacttc gaaaaaatag ccgagacaca gtaacttcaa aactgtgtcg 360
cactatcagc aactgctctc atgtatattt ttatcattaa tggatcattg gtttccgctt 420
aatttg 426

<210> 494

<211> 548

<212> DNA

<213> *Drosophila melanogaster*

<400> 494

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ctcatgtatg tgggttgtag atacatacaa atgtgccagt tgagttttcc caatacgcac 60
tgctctgacg tcacgagcat caacatcagg agcaaaagca acagcatcgt cataatcacc 120
atgtttatca tcgcaatcgc cacaaaagca aaagcaacgc aacagcagat gtttatgtgc 180
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ttttatctac gcgcacacag gccaacagtc gacagaattt ctgtgctttc gtcgcagcga 540
gcatataa                                     548
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<210> 495

<211> 120

<212> DNA

<213> *Drosophila melanogaster*

<400> 495

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aacgcgtaca aaagcgcata aattgagagg cgagagttgg ctagcaacgc gcagggttgt 60
cggctatatg gggaaaaata acaaatacat ttcggtaatt atatggttcc gaaagaattc 120
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<210> 496

<211> 408

<212> DNA

<213> *Drosophila melanogaster*

<400> 496

gccccaaactc tctcttttgg caagaaaaat cgatttcggt tttttgcagc tctgggacgc 60
cttcaaattg cgggttaaact gaaactgttt gaaaatagct tttgtaataa gtgcctttta 120
taccactatt acccacactt tacttaaatt tctaaagcaa tcattgttat tacatgacag 180
attgttcaga tattccctta caagttattt acttggtttac ttattttctt gtattgaata 240
cgtataatta aatataatat actaattaaa aataaataac gaagacaaga gaaaatgtct 300
aaaatagaaa tgagcttaat ttaagtaaat aaattatata gccttatctc taggggcgtt 360
gtttgttttg gttttttatt attatacata tgttctcat gttcaata 408

<210> 497

<211> 559

<212> DNA

<213> *Drosophila melanogaster*

<400> 497

aactgagcta tgccagcgaa ccaaccgctc gtgttttgcg tttttctcgt gagcgacgac 60
cgcgagagca actcgggtgt cagtacactg tgcgaaactt ggtgtgcagt ttaaaaaatt 120
cattcaaact ttaacttcag ccttaacaag ccttaacagc acgtataact aaaaagacaa 180
tgacagtata atattagtaa ataaacagta aaatattgat taaaacatta atattaatta 240
attaattagt taatttatta ttaactttaa aatatgaaat gctaggatgc accgaatgct 300
ttttatatat agtcacttgg ccgttttttt ctgtgcaatt ttgagatact tgacgttggt 360
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ttgatattac tcatcatcat ctcatgctca tctcagttgg aaaataattt acgcttgtag 480
ttggagtaca aaaaatgtgt gctgcaagat tgatgtttta agcttatttt aactaaattg 540
gtcctaacta tttggttcc 559

<210> 498

<211> 592

<212> DNA

<213> *Drosophila melanogaster*

<400> 498

acccactgc tgaccctggc gccattcgtg tccattcacc gtgcgcaact acaacaacat 60
tagccgcctt gtcgtggctt atttgcattt acttgggcat aatcagagcc gggaacgtgg 120
cattcctttc caggatatta aaccgcagc cgggacgggt ggggttaacga gtattggcca 180
cgttagagga atttctctga aaggcgaaat gcgtaatggt aacttttttc gcaaattatt 240
aattcgaaaa actgctttta gattagctca caaaatcggc acaaagctag tgatattcta 300
ctggaattaa aaaattgatt ccatattcca tgtgacctt aataaattgc aatttattat 360
tcaaaaggcc catccacctg cttcactttt aaaacaacca attatttacc caaatgatcc 420
gtcattacc ttataaattg atgaactcat attagacca ccagcgagcc gagtgaccaa 480
acaaattagt caattcggtt aataattggt ttggatacgt ctacaatggt gcatgggtat 540
ttttcataat ccattgtatt ccgattgcac tggtttcgat ttttggctta at 592

<210> 499

<211> 108

<212> DNA

<213> *Drosophila melanogaster*

<400> 499

cgccacacgc tttatgtaac tgcgttgta tgcgaatata cgaatatgta cgaatgaacg 60
tacgtatgta tgttttatgg gggggatgga gcgagtgtat tagaattc 108

<210> 500

<211> 284

<212> DNA

<213> *Drosophila melanogaster*

<400> 500

gaccaggcgc tctcgaaata ggcgcacaaa actaacgaag ctcgaccaga tgctgcaccc 60
tgtatgcggc ttgctctcg ttttctaccc gcttcgaaat tcaaattcgc ggcgagcgtg 120
aataacaaaa aggtgacgtc atggcggcag cacacggcat acaaacatac agtcgctatg 180
gatgtgtctt actacagtcc aacttgctta ctaaaaccaa tggtcagtat agaaaaaggt 240

gactcaggac caaataggaa ataattatag tttaaactga attc

284

<210> 501

<211> 455

<212> DNA

<213> *Drosophila melanogaster*

<400> 501

gcctagatgc tagctatgta tgtgcttgat tactagtgca aataactaact accggtttag 60
atgcccggcc agattgtgtg cacaaaaaaaa aaaaaaatga agaaatggac gggcgatcga 120
gtcagctagc gatcacttat tgcacacaga aaaatttggc ttaagatcgg gactatgate 180
gtggatgcgg aagaaagttg aagatctaag cacatttaag tacgatattg cacgttctca 240
tccggaaaga ttctttgcgt tgagaacatt caaatcttga accaagaatg gctttattcg 300
cagtggtagg tggcttagct aggtgggctt ttcgcttgac cacgatccaa ttgccacag 360
gaagcttaaa gatcagggcc cgatcaatac tcaaaccacc ggaccagga agtcgtttaa 420
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<210> 502

<211> 522

<212> DNA

<213> *Drosophila melanogaster*

<400> 502

agctagcgaa ttaatcaccg atgtttgcac ctgccttctc attttcgaat cgaaacatca 60
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ttgaataatt caaaccact caaacaagcg cgttagcaaa caagctatcc gctgcaatac 180
cgcgtatcag atatgaatag taatcgagtg accttgtctg tgtgcgcagt cctgtccgaa 240
ttgtttgctg tgggtgtcct tottcgactt ccagtcctt agtttccac accacgttcc 300
cgccaacttc cttggcgtct atccctgtcg ccagatgggc tagcctggag gacgccccg 360
aatgggctct ccaactaacg ccttgtgcga ggtcaaaaca ctggaaatgg aacactaggc 420
cacaagtacc aggactttag ttaaattgggt tgctgacgaa aggtaacaat tgccaattca 480

ggtgagtttc actcgcaagg aaagataagc tgaataacat aa

522

<210> 503

<211> 676

<212> DNA

<213> *Drosophila melanogaster*

<400> 503

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ctgccttttag cgattgcaag tagccgaacg catccggtga tcgtagacca cgatcacccg 120
tggaatgtgc cagcgttttt gccgccgttg cggcggctgc aacatgcggt gatgcagccg 180
gtggtgcagc ggataaccgtt atcagcaggt cgggtgtgggt cgatcagtcc atactttctg 240
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aaaaacattc ttctactaaa atataataaa aatattaagg ggaataatgg atggcaacct 660
ttcattggct ttgagg 676

<210> 504

<211> 541

<212> DNA

<213> *Drosophila melanogaster*

<400> 504

ggacgaggca agccgcaaga gagcggcact cacacaggga caggcactca cacagacaca 60
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ttcattgcac agaccattca attgcacatc tctagcagac aaccaaccag gtggcagcgc 360
tttcgactca aatacaagtg gcaaccacgg tcgggcattt taataacgga aaagggatga 420
aaagtccaga atagcgcgcg cgtttgggaa atgggttaa atcaaataga ctaggaagtg 480
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<210> 505

<211> 59

<212> DNA

<213> *Drosophila melanogaster*

<400> 505

gaccacgcct aaattaggct aaagctcagc atcgttttgc atctttccga aatgaattc 59

<210> 506

<211> 288

<212> DNA

<213> *Drosophila melanogaster*

<400> 506

ctctgaatta ccattgaaaa ttcattcgct tcattcattc tttgaacaca ttcatttagt 60
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accaactgaa tggcatgtat tctgaatacg cagtaaaacg aatcgatact ggagaatggt 180
gttatgcac cctctagtag gtgtggcgcg cgtttttcaa tttgttgctg ccggggaagg 240
cacattagcg gctaccagct cctgcacacc gttatccagg gggaattc 288

<210> 507

<211> 234

<212> DNA

<213> *Drosophila melanogaster*

<400> 507

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agacgccgat agattcgggtg aagtaaaatc gtgcaatttc ttttccaaag acttccacta 120
gttaaaaaat agatacaaaa atgtccgaat tgcagggtgaa ctgaatctac gtcaaatacg 180
cattcgtatc ttaaagtctg attacctatt caaacttaac ctaaacagga attc 234

<210> 508

<211> 31

<212> DNA

<213> *Drosophila melanogaster*

<400> 508

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<210> 509

<211> 892

<212> DNA

<213> *Drosophila melanogaster*

<400> 509

tggtcggcat tgccgtttca cagaagcgat ccacaaaaag cttgcgctct gctcgccttt 60
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acatctactt atctactgat ctacttatga tctgaatact tatcgtattt ataccaatta 180
aagtagttgc atacattaca tacctgtagc tctgtggagta aataattaaa tttatattaa 240
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<210> 510

<211> 53

<212> DNA

<213> *Drosophila melanogaster*

<400> 510

gttgggttaa agaacagaat attccgatca ttgtaacggt ggacgttgaa ttc 53

<210> 511

<211> 197

<212> DNA

<213> *Drosophila melanogaster*

<400> 511

ggatgtgcca tcaattctga cactcactgg cctaccgggt ttttcgatag ttgaaagtgt 60
cgtaatatcg agtacacgat actttacttt tcccttcgtc cctttgaage cctggcactt 120
ttagatttcc cgtgaaagtt caacgtatat ccgattagtg ctgcatactt ttagacggca 180
aaaagctgat tgaattc 197

<210> 512

<211> 305

<212> DNA

<213> *Drosophila melanogaster*

<400> 512

tgccattcgc tegtctctcg gctttatgag ccgaatgtga tgtacaaaca gtgagaaaac 60
tggttgtgtg tgtgtgattg cgccatcgct ctatgcctgt gtttctctct gagcagagca 120
catttcgttt gtttacagtt tttcgttttt ggcctatggg aaggctgtat tcggattctc 180
tttaagcaat gaatttaaca aaaaattagc tagccagtga agcatatctc ttttaattcta 240
ggctgtaaaa taatttttaa gaataccgat atgttttctt tgtaagagtt ggcaatctga 300
atata 305

<210> 513

<211> 387

<212> DNA

<213> *Drosophila melanogaster*

<400> 513

gacgagcgaa tggcaaatga accaaccgac ctgaccgacc gccactccgt cttegcacag 60
tgggttgtaa acttggctta acaattgaaa tacatttcag gtatggatac aggagcgagc 120
ttcgattttc acttggcttt ttaaaagcct tctcttatca gcaatcgggt cttaatacgt 180
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tgtcaaatta aaatttttga tgagagcaaa tctgtcttca agttttatca taaaaatgaa 300
attgatttat tctcttttta tttaaaaggc tcgtgtcctg aagcgcgcta gaaagtttaa 360
gaaattataa gaattttact agaattc 387

<210> 514

<211> 530

<212> DNA

<213> *Drosophila melanogaster*

<400> 514

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tcgcttctag actatattata gcttcctcat gggtgacctt gaaaggagac tggacagccc 120
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aatgagtttt tcgacatgca ctcgataaag tcgcagcgat aaggtcgcag agtgctgaat 240
cagtcgactt cccgcatggc aacagttgga actcgttttt agccactgga actggcgctt 300
gtgccacata aaccggacag ttgccgctga aagttgccgt taacaaagcc attgcaatgt 360
acagtcgagt caagtgggtca cgtgattaaa aacgagcaag agcagaaaat caaaagcaag 420
ataaacgggt ttcgttggcc aaaatgcgtc atcgccataa agccttgcg c aagtcaatag 480
aaacagctgt tgccaaatcg agaagcaccg gatcaaggag gtcattgcgg 530

<210> 515

<211> 516

<212> DNA

<213> *Drosophila melanogaster*

<400> 515

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ttccgccagg accaattgcc ttcccttggc aggggaaatc gttgaaagcg gccccgcaat 120
tgcgctcctt ttcgtacttt tagcaattac ggcgtagcgt aattggagag aggtgtaaatt 180
tcacaattta gcaactgcagt cgttgtgcca cttgaagtcg tgagtgcagt tcgataatct 240
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gattgcgata ccattcgatt cgattgtagg aaatgaaagc acttaaaatt atatagatag 360
atacttgtat cttctccagc agaagcgtgc ctttacttga tatgcgtgac aagcaaacac 420
cattaccctt taaatgtcag actgcaatga attttggatg tattaccggg attctggcct 480
tttaaagtcg ctcgataagg caccgtctgg tcggcg 516

<210> 516

<211> 583

<212> DNA

<213> *Drosophila melanogaster*

<400> 516

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gtaacgttga gttccgcgtc cgtgcgttct gccttccaat agaaagtctg ggtgtgaatt 120
taccaagatt ccagtgcgaa aatcaactca cattgctcgg tgatccgtgc ggcggtataa 180
ttgcagccgg aattgcataa gttgcggcga gcgaaagaga gtgcacggat ttacagttat 240
aaagggccgg cagcgggtggg gcggcgacgg cagagcacgc agaagaagaa gagacggcag 300
tggcgaatta aaaaaaaga tgaaagaaaa ttcggggccgc taatttttct tcaaatttgt 360
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ctcgcgctca cccacacagt cacaaaagtc ggcgacgtcg acgaccaca cgctcacata 480
ggggacgtaa aatccgtgca tacgtgtgga gcgtgcatat ataaccatat tggccgattg 540
gagggccccc tctgctttta ttttttttac ttaatttcc att 583

<210> 517

<211> 437

<212> DNA

<213> *Drosophila melanogaster*

<400> 517

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gccatattta acttactctc ttcattccgg ctccgccttc ttatgtatgc cccttcatgc 120
tccgggggtgg ctgcccctgg cccaagcgc cccggagaat cgctggcatc tgcaacggcc 180
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tttcgtgccc gtttatgaca agcccggaca tacggtttgt tcattgccga ccggcatctt 360
ttattctgtt acagtgaact ttacctctcc gtcctccgc cccaccggg eggacagtct 420
tccttcggca ctccctt 437

<210> 518

<211> 442

<212> DNA

<213> *Drosophila melanogaster*

<400> 518

agtcaacgaa aagaaaatag tgagaggaga gggtttattg aagagagcct ctcatttttaa 60
aattttctctt taagctgttc cttctaaagg acacaagaaa ctaatatgtt tatgaaataa 120
gaaacttaac cgtgtatgtg ttttccaatt ttgcgtgaac aaataaaaga gctcaagcat 180
tttatcgttt gagtaatttt agataaaaaat ttattaatat tttttaatgt tttcaatttg 240
ccatagacaa cattttttcc aataaaattc ggtaataataa ataacaccat gcctgcaatt 300
tttatataaa ttttttagtag cacgctctta gttaaatatt taggtcaata aaataattat 360
ccttattggt ttttttttta atttgcatat tggttggtga ccagctgtta agaagaagag 420
agggagagag aaaaagagaa cc 442

<210> 519

<211> 536

<212> DNA

<213> *Drosophila melanogaster*

<400> 519

caactcatat gtcattttca catctcacat tacgtctaata atgtgtatta tgactatttt 60
tgtttatgct tcccgaacc cttcaattca gtggttagttc acatgaactc cttttcatag 120
ttaaacaaag cagctgcatt tcaaaacttg ccaatgtaag tgaagtaact gctagaagct 180
cctacaaaca agttttccat attccacaat atgcatttag catacgccat gtagttaatt 240
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gtaatcgcat ttgtatctgc aaccacgcga cctcgggctt tttgattgtg actccgcctc 480
ggattcccga atccgattca gactcggatt cctgatocca ttttgatttc ggtttc 536

<210> 520

<211> 469

<212> DNA

<213> *Drosophila melanogaster*

<400> 520

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gtgttggtgta ttccctacgc cctcttttct cacgcttggc gcgcggggcgg agggaggatc 120
cgtgcgcacg ctctttggag tectacegct ctttcagtcc ctctttccac tctctcgatc 180
ccagaggtgc ccaaaacata agttgaaact tatttaagta cggcttgaaa tatttaaatcg 240
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tttaatatatt tttttttaat gagcgggctt aaaaacatta aatgggcaag attatataaa 360
tattcaagtt acgcggttaa ttaaaaacat taatagaagg gtttttcttt ttgaaattaa 420
accaatccgg ttttgttgtt atgaacttat ttgactttaa attattttc 469

<210> 521

<211> 417

<212> DNA

<213> *Drosophila melanogaster*

<400> 521

gctcccgttc tcccgccgct ctctcgccac agtgggcaag gtggtggatt tttcgaacat 60
aatattaatt ataaaatatt caaaataatc acacagcata taatattttg ttacataact 120
attttaagtt ataaacatat atttctgtta tatttaataa gtattgttta tactcgactg 180
tttaagtgtc atatcagcga tttgtaccac tgtgccgtgc tccacttgct cccgctccca 240
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ttctactact acgatgccgc gccccttcgt tttcattcaa aatttcatta aaggatgcac 360
acatgcacac ctccctcccc cagacacaca caciaacgca ctggtctggt gaattgc 417

<210> 522

<211> 543

<212> DNA

<213> *Drosophila melanogaster*

<400> 522

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tattttgcta cgctcttttt gtgtttactt atcatgaacc atgcttgta tgcaataaaa 120
attattttatt agaaagttat actatagtat tgataaaaac tcaagtaaca accaaatatt 180
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tgtctcataa atgttcagag cgttccgctt cgctagttag gcacaaactt agcgttgcca 480
gtgggtccta caaatagact ttagggcggt acggtgttcc caattgacga attataaaca 540
aaa 543

<210> 523

<211> 510

<212> DNA

<213> *Drosophila melanogaster*

<400> 523

cggacaaaac taaaataaaa cgaatcccaa acctgattgc ggtaaaaggc caaattggac 60
cgttctcggt gcctggtcgg tgccttgagg ccagcgtag tcatcgcat catcatcatc 120
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ctgtacgaag ctgaaatacc cttaagacat actattaaat ttaaattttt caagcttgta 480
gcgcattttt caagctttcg aatgaattc 510

<210> 524

<211> 527

<212> DNA

<213> *Drosophila melanogaster*

<400> 524

gaattcggga cattaattgc ctgatttaag ggcgaattaa agtggtacag tgagagaaaa 60
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ataaagtatc caatccaaga aaatgagggt atgcgaatgt agtaattaga ttctaagttc 180
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tgggctgtgc tgccgcattg ctgctaateg cggttttcca cttttaaaact caaaataata 480
aaagcaccaa gctggcaccg acgtttcagt ttgagtcagc catgatg 527

<210> 525

<211> 91

<212> DNA

<213> *Drosophila melanogaster*

<400> 525

cgctggcgta atgaaaacaa ctcccgcgt ttttcgcgcc cgcaagagag cgacagtga 60
agagagatgc taaatttagt tcaatgaatt c 91

<210> 526

<211> 417

<212> DNA

<213> *Drosophila melanogaster*

<400> 526

acctcgactg aattcacttg ggtgatttgc gcgacgtcct gcacgatata cacatttaag 60
gatgatggaa aaatgctcct tcaccttttc attttctgcg cttagaagtt cgtcttgcca 120

tatagcaaac aaaaagaaaa aaataacgca aaaagcaaaa aggtcctgtg gatggggcag 180
gcaggcggct tgtgaccaca tgacaaagat tttagatgct gggcttatat ttgcgtgatt 240
ctcttttaat atatggaatt taataggaat taaaattggt attcacttaa ataaaattaa 300
gtgctattta ttgaaacaag ttaagtggc tggtaatggt tacaattggg gaattaaaaa 360
cactcttcac tagcctattg gtatcattcc cctaactgct accaatcatc ctatgtt 417

<210> 527

<211> 578

<212> DNA

<213> *Drosophila melanogaster*

<400> 527

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atcaactagc attgatcttt gcacttgaac aaaacgccga aagcgacgtt gagcggcatg 480
caaaagttaa attgacaggc ccccgagcc cctaaaatat tttttttaa ctagaactga 540
gcccgcgcc ccattgcatt atctattaca aaaaaaa 578

<210> 528

<211> 169

<212> DNA

<213> *Drosophila melanogaster*

<400> 528

gtctaggctg ttgctgtctg ccagtgtggg tgtagtgtgc gaaaggccct ctctagaatc 60
gttggttcg aaacaagacg accatgatgc atacacaaga ctcaaagacg gagttttttt 120

tttcaatttg gcaaggcaac tgcaatagtc tattccttga caagtgaac

169

<210> 529

<211> 348

<212> DNA

<213> *Drosophila melanogaster*

<400> 529

gagtaaacac tactcaatgc agaacagaga ctgggcacat tgaatctatc ggcaggcagt 60
actgccagac cgctatcacc aaatttactt aaaaagaaga tacaaatttg gacatttctc 120
tgcagacatt ttttaagatag ttttaagtcc ccattttatt atacagcaac atggcacaat 180
ttgtattaat atttgtttaa ctatcgccgt cttaacagca ctgaaatttt ccagtgtgaa 240
aactactgat attattaatg cttctagttc tatcgatata atagcgaata caccacctt 300
aacatatagc gagtgcacaa tctgttagcg tttgccacac tattttaag 348

<210> 530

<211> 463

<212> DNA

<213> *Drosophila melanogaster*

<400> 530

gttcgagagc gtgtgcgttt tgtcttttct cttgagcatt ccactgcaca cgttttccac 60
catcttttca caaagtttcc atttattgca cctcgcagcg aacgagggta tattgttttg 120
acggaactaa gcagatttaa ccacaagtat caattagggt gaggtttact aatgattttt 180
tttttttgaa tttggtcaag gattttaaag cgagaattat taattcaaaa acatcatttg 240
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tgaaaagggt atccattcat tatttaccat cgggtgctctc ctgattgcta agtatattat 420
agtcgggatc gtgccccttc ctacttgctc attgtttcct ttt 463

<210> 531

<211> 150

<212> DNA

<213> *Drosophila melanogaster*

<400> 531

tacaacccat tgatcttcag tcgctttcaa gtggggtaaa caacggagca cgctcatca 60
acagcagcaa catcagcgcc aacgattggt acacagcgcg aaaatcgggg gtgccttcaa 120
agcaattcgt ttcacaggg aggtgaattc 150

<210> 532

<211> 439

<212> DNA

<213> *Drosophila melanogaster*

<400> 532

ttcagaactt ttttctatgc cttcatcatg gtaaaaaatt ttcaacgcca aaacaacaaa 60
atggctgac cttcacagt gctgggcacg ctataataaa atactggaat ataaaacgga 120
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aattgcctgt tcaattatgt atgttatatt ttttagtagg aggggtaaat ataatgaagc 240
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aattgtgcct catttcctac tcaaattttc tcttaagcta caagggtatt gtaatgaaca 360
gaaaagctca aacattcttt cgtaaataaa taaattacag gcctcataat ttaataccga 420
caattaatat ttatttaaa 439

<210> 533

<211> 521

<212> DNA

<213> *Drosophila melanogaster*

<400> 533

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gtacccatca aacacacgaa aatattattg ttactgtgta acgctttaa attaatattat 180
ttttatttgc aaacataagt cgcaataaaa tctgtttaga aattaactta aattttaata 240
ataataaaaa ttggaatgaa taatatacta aagtaaggag tgcctaacaa attagcaaag 300
aaaataaaaa atttaaagt agcctaaata taaaaacat cggcacagtt agtacgctgc 360
aaaagtaatt tagcaacaac attcagatgc aaccagttcg ggtttcttgg cttcctcgct 420
ccattttcac gtgccttttg tttttgtgcg ataaatcaca aagttttctg aaaacgaaac 480
cactgatacg gccacaaagt ccccaaaca caaaccacca c 521

<210> 534

<211> 511

<212> DNA

<213> *Drosophila melanogaster*

<400> 534

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atcgcatgtg cgcgggggtgg tccattattt gatttccgcc aacacctctg cctaccgaca 120
cctatggtac cctctaata gatttagggc caattggctg aactagccga tccgctccgt 180
tcgctcgctc ataaatcact gcgaactgcg gactgtcgcc gtcgccgctg acgtcgaca 240
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aagacaacaa caagtgcgat cggaagacgg cagcttttca ggagcaaac atacaggtca 420
agatatgcag actaatccca tctaattgg aaacacacac tattttattcg ggtttttttt 480
attaatacca agctgaattg ttacatttaa c 511

<210> 535

<211> 461

<212> DNA

<213> *Drosophila melanogaster*

<400> 535

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gaaaaacatg gcgtttatct gtcctgccc atgtctatgt gtgtcgcacg gcctgggtgtg 120
tgtgcgtgtg tgcgcgggag gcagtgaaag cggtaagagc gcccgcgcgg gagagggaga 180
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gagttagaga gtgagtgggg gtgggaaaat agatgggtgt gagaggctta cacttaaaaa 360
gagaggacgt aatgagttag ctatttaagt ttatgcgaat aataagatat taccaaaaac 420
agttatatag gggcaatatt ttaaccatag tctagtttt t 461

<210> 536

<211> 383

<212> DNA

<213> *Drosophila melanogaster*

<400> 536

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gcgctctctt tgctcttttt gagagcggcc aagtatctgt gcgctgggtgt gcgtgcgaaa 180
agtatctgtg tgcgctggaa aaagtagcaa acgaggcggc acgacgacaa cacgaacggc 240
aacaacggca ataatgatta tcattataag tgggctggcg ctccggctgt gtgtggcact 300
caggggattg ggattggaat cggcatcgga atcggtatgc tacggtagat acccctcaac 360
ccccctaccg aaacggtacc acc 383

<210> 537

<211> 544

<212> DNA

<213> *Drosophila melanogaster*

<400> 537

367/586

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tgagccgctt actttctggt ggctgctgca ctttgacggc gggttatata gtgggttata 180
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tgggaaatat acatacatat atgtaatcgc tttgtaatac aagaaccctt ttaatgctat 420
gaggtactgt atcggtaaaa tttttgctaa ggaaataaaa ttacttgga ataaacttgaa 480
atgttttccc tatgtttaaa acttttagttt tggtttgaag tatgttctta aaatttatgt 540
tcca 544

<210> 538

<211> 530

<212> DNA

<213> *Drosophila melanogaster*

<400> 538

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tctaaccggt gtgacaagtg tcaatgtctc attggaattg aaattgtttg ctcggctttg 180
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ccaaatcggc aaggtgccag ctgtgggtgt gaacctgctg ggacggggag ttattgtcca 300
aagatcaagg ttgttttggc gtgacaaata tttgaggtgt ggactaattt gatttgtatt 360
taaagccacg acaccgaaa tcgtataaga taactgcaga ggtccttcct tagatTTTTT 420
gtccgtatcg aattggtatt tgaatttatt tctatttca tactatatac attttaaaca 480
ttattatatt ataataataa taatatttaa ttctaattta taattaaaca 530

<210> 539

<211> 507

<212> DNA

<213> *Drosophila melanogaster*

<400> 539

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agtttcgagc taaaaactag aaattacact gttaaattta aaacttacta ccaccagtt 180
agtcggaact attaaaaagc ccttttcgaa agtcgtataa tgtataacat ttcttcccat 240
cccatgacc tatgcaaaag ctacaccctt taggcaatat ctttacgaca tcaccttata 300
cgccgaacta cctaggaaaa gcgctataat gccgttccca ttcactgggtc gtaacaccta 360
gaacaacaaa gggggtcaca aggcgtaaat ttagttttaa ctatcccata tttcaatttg 420
gctttcacia tcttatcgcg gccacgggtg taatctgata aaatcccagc ccagcaaaa 480
tagtaccga aaatcacttg ccctaac 507

<210> 540

<211> 577

<212> DNA

<213> *Drosophila melanogaster*

<400> 540

acctggcttc agcagcgtgg ttacatata tttaagtata tgcattgtgtg tgtgtgcttg 60
tgaggggcgg tgtgtttgcg ttttttagcat tccagaattt tgcctttgt ccatgcggtt 120
tcttctcttt tttgcgact ttgcagaaaa aggtggcagc tgctcggtcg ccatttataa 180
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gaaaacgaaa tgctcgctga aaaaggcgaa ataatatggc gttttcacta ggaaaccga 360
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caagcaaaat gaaacattca atatnnnnna tgtttcaaag gttttctata ttttatattt 480
ctatacactt accatctcag caaacggtta attttccatc tacacgaata acacaacatt 540
tgttccattt tctcagtatt acttctcctc tggcaat 577

<210> 541

<211> 513

<212> DNA

<213> *Drosophila melanogaster*

<400> 541

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ggcccatat acataaattg cttatgcaaa aaataaccat tttgctgagc gccaagtcag 60
gagaggaaag cgttctcttt cttcgattcc ccacctctct ctgctctct actaccgctc 120
tggtgatacc attttcttta aggttattgc agtgcaatgt cctcaattgt cggtcgcctt 180
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cgctcggttct tttcccgctc ctttctgctc ctctatgtgc ctctcttttc gcagcagttg 300
cccttcgctg gcacaaaatg tgaaatgtga aaggatattc cgttttattg tcgtggctcc 360
gattccggag ttcaatattg gtttattttg ttgacttctg atttgtcatc atttgtggtt 420
tatttgccag tgtgggaaca cattaaatat ggtagctgg aaatcaaagg ttatctggat 480
tactttccac acacaaatgc ctttaattatg ttg                                     513
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<210> 542

<211> 302

<212> DNA

<213> *Drosophila melanogaster*

<400> 542

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atatagggga tccataaaag aacggcgcgg ggcaaggggc ggctcatcaa ttaacgacct 60
tttttttttt tgggcagtca aattgaggaa acattaaaag tcgcgccaca tcaggcactt 120
tttgttcggc aaagctttgt ttcggacacg ctgagtattt ccatcgcaac gggtgaccac 180
tgtggcagac cccccacaa aattcgtaac cgcaacaaa tctgcaaaac catttgcaaa 240
ttaagcgca taacgatgtg tgggcagata gaagagaaat gtaggataaa tgggtgaagg 300
tg                                     302
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<210> 543

<211> 611

370/586

<212> DNA

<213> *Drosophila melanogaster*

<400> 543

caccggagcg tcgagcgggg ccaaggacag agaggcagca ttcttggcct ttaaaaatcg 60
tttgaaggaa caaggacggc aatcatatga aaaccggaaa gctttcagct gaaagcactc 120
acatgcacgc acacccgcgt ttagcgcacc gctcgtgcgg cgagcttttg agagcgacat 180
ctgccggaac ctatcgccaa gttatcgata gatcgtaaata tcaaaactgt ggcggtttgt 240
caatgaaata ttacataaat ttttaataagc aataaaaaat acaatgagat tatctagtgc 300
aaagaattgc aaatttataa ggaaaagaag aaagacgaat ttaaataattc acaagatata 360
attatacttt ttcaaaagaa tgggcctcta agttatatatt aagttactta tctaagacct 420
tacctgttcc agttcatcta ttattatata taaataacct ttttaaacca attttgaaga 480
atcgtctaata aaaagcttgg attcgatatt tgttttccaa tgccaggaag attgttaaat 540
tttgaagttg aaaccgcact ttttaattgt caaattcaca ttgcattatt tggttttcat 600
attagttttt t 611

<210> 544

<211> 82

<212> DNA

<213> *Drosophila melanogaster*

<400> 544

tggcttaatg aaaacacctc ccttgctttt tctcgccgc aagaaagcga cagtgaataa 60
tatatgctaa ttttattcca at 82

<210> 545

<211> 858

<212> DNA

<213> *Drosophila melanogaster*

<400> 545

371/586

aagattttacc tgcttcaact tttctctttc gtcgtcttta aacataaaat ttaaaaagag 60
aaaattaaaa ttttaagcag tttgattttc tctctttctt ttcactcaat ttttgaatta 120
tggtgctctt ccttctctca atatcgtttc cttgagcgtt tcttgaggtg tgacgtcacg 180
gatgcgaagg ggaggcactt cgggtgtttc gtgcttcgtc tttgttcgtc tttgcggcga 240
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tcgtcaacag ctgtgtcgtc atcgtgtcat cgggtgtgga gtagccgatg gccatatctg 420
tctgagctgt ccgagtggta ttggtgcacc aataagaatc ggccagtggg tccagtgcct 480
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atgtagacgt agacgatgat tatataacag ttttctgtga ttctctcat tccgatcgaa 780
tcccttcttg aagcaggctt aattaaaaac ttttggcatt cacttgaca aaattaccta 840
ctttaagaca ttccttca 858

<210> 546

<211> 277

<212> DNA

<213> *Drosophila melanogaster*

<400> 546

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atgaaccaac cctttcatat taaaattagt ttttctccc ctgcaaagc cgattattgg 120
gaagcgaaaa gagttcgatc cgagaccaa aaaatgaatg ctgacaactt agtatttggg 180
gaatctggaa atgggatctg tttgattccc cgtttgttgt attccaagcc cgtttatgac 240
ccctgccttc cttcatggaa tctatttcaa ataattt 277

<210> 547

<211> 370

372/586

<212> DNA

<213> *Drosophila melanogaster*

<400> 547

ggcgtttttg aaaattgaaa aaatagagag ctttagtagg tggcaaaaaa gcgataatca 60
aactgggact tttcgttcaa caattgggta aaagcttaaa cttagcaaag tatttcgaaa 120
agttaaattt ttgcttagac tttgctctta aatttctttt aacaaaattg gtaaacacat 180
tgaggacatc tgaaaataat aattaaacaa attgcaactt ttttcaacaa agttcgaaat 240
actttcttga aaatagctaa aaacattggg ctatccgatt atttctgcct ctccaaagcg 300
gtaaaccatc gttaggcgtc catcactatt cacagatggg cgggatattt aattttgaac 360
gcatgattat 370

<210> 548

<211> 539

<212> DNA

<213> *Drosophila melanogaster*

<400> 548

gacgtgcctg tacccatcac acacctacaa acgtatacgt catacacaca cacacacgca 60
cacatgaaga ggcagacaga caagcaactc tgggctcccc cctccctaaa cctctcccct 120
cccagccaca tactgccgca cttgcaacgg gaatgttggt ggtattgctc gcactgctca 180
aaactccgaa gaggattaca aatgggtgtt ttgtttttgc ccaaaaacgg aaatacagac 240
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gtattccccg caactttttg cgcacttttg gggatatctaa actgattaca aacccttaaa 360
agcagcaggc acaattgaaa ttattgattg ccttaaagtt aaagttaatt gcggttatga 420
aatttttggc taattgttcg tcattgggca aaaatgaaat gctgaggaat ttgctttata 480
aaaacactta aatttatagt tattagccac tgaatttgta ttgcagtcgt taagaattc 539

<210> 549

<211> 449

<212> DNA

373/586

<213> *Drosophila melanogaster*

<400> 549

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catggtaaaa aataaaataa ttataataa atgttttaaa tataataaca aatattttga 120
gttaataactt tacatttata tttaatacaag gtaagctaag atatttgaga ttattttagt 180
ttttaccaag ctgcaaatta tattacacct tataacttttt tttaatgacc agtgtaattt 240
cacttggcac gtttttaaagt attttgtacc gttacggata cggatcatatt ataaacaata 300
aaatctcgat ggactcattt agccgtacaa aatataaaca aattaatacc aaaaagacat 360
aatagtcgct ttgaagtat atcaaaacttt tatcaaacca tgagctgcaa ctacgcggat 420
ggattgtcag cctacgacaa caagggaat 449

<210> 550

<211> 85

<212> DNA

<213> *Drosophila melanogaster*

<400> 550

gactggcgta attaaaacgg ctcccgcgct tattcgcgcc cgaaagagag cgacaggtag 60
agagaaatgc aaaatctagt tcgga 85

<210> 551

<211> 485

<212> DNA

<213> *Drosophila melanogaster*

<400> 551

agtgggacca ggcgcgacta tcgcttgatt ccgatggcac gaaatgggtca aactttttct 60
cgagcaacga atatcacatg acggacatgt cccatgcagc agtgggacca tgcgcgacta 120
tcgcttgatt ccgatggcac gaaatgggtca ccttgaccg ccttccctgg cttatttttc 180

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ccttataaat ttgtgtatgc ctatcacaat tataacacgt ataattattat aaatagtgtt 240
atctatgttc cattaaattt tccgatacat aatattaaag ctatttttta attaaaaaaa 300
ggattttttt aatattgaac aaactaacta atttaactaa ttgtacgcat tgtgaccata 360
ccgacattga gtaacttgat tgacttaaatt ttattttctag gttgtcaaga acattatttt 420
taatcaataa ggtattttcta aacaattatc tgcaccttga aacaccctac atttttcgtt 480
ttggc 485

<210> 552

<211> 314

<212> DNA

<213> *Drosophila melanogaster*

<400> 552

gtcgcgtgtt tgctgggtgtg tgtgtgcaag cttacaagct gcagctgcca gctgctccaa 60
agagagagag agagcacgag agcgaggctc tcccagagca aaaacttggt ttcaacggcg 120
ctttgaagag gagcataaat atgcgcaaaa aagcacagaa taagaagcag gcaaaatgaa 180
ttaatagaca atcaagccaa acgatgcgtc tgaattaata aaagaaatac cataaaaaag 240
ggaaagagaa agagggagaa aaacccttga gttgaaggaa ggttataaag gttggaagcc 300
gcgggcaggg gggc 314

<210> 553

<211> 515

<212> DNA

<213> *Drosophila melanogaster*

<400> 553

cgtcagtcce acacaacagc aacaacaatc agcacgggtt tgtttgtgga tcccattcgc 60
actgagatac gtcattgcgc agaattttca tgaatgaate gcgaccggca cttttgttaa 120
agcgaatcgc gagctgaaaa ggaactgggg aataggccgc aaaatgcaat aatatatatg 180
ctcggcattt ataaataaat ataaaaatta agtaacacca agggtagtga actgttacga 240
aacgttgccc aacactggtc ctattggagc aatatttaaa aattcacttc gttcaattag 300

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aaattttaaag ttacgaaaat tacatgctaa ttcacataga aacttggaag gaaattatta 360
caattaaatt ttctaacgaa tttgatttaa tcgagtaaga aaagtaaata gtttaagcca 420
tctgtttaga atatacctgt aaaggatatt actattgttt gctatattat gggttctaaa 480
aataccgatt ttaagaaagg tatctggctg gtccc 515

<210> 554

<211> 357

<212> DNA

<213> *Drosophila melanogaster*

<400> 554

gtctgttcta ttgtgcggaa atcgagtga tgagagggga agtccacaga aaccgcaagc 60
aaaagcaaca agcgtgtggg aaggggaaat cgaaagggga agtaaagagt atgtgtgggt 120
gtgtgtgtgt gcgtgaaata tggaaattga aaatgcaatt aatcgtgaat taatggcaag 180
ccatagaaat cgctcaatgg cttaaagtgc aagagaaaag tgagcttttt gttattgttg 240
tcaacgcgga aagacaaaac cgagaatctg tggtggaagt tttaaatagc tgttatttat 300
tttcgttttc gcaacaacaa taagccatca agcgaagtgc tgaaatagtc aatttac 357

<210> 555

<211> 619

<212> DNA

<213> *Drosophila melanogaster*

<400> 555

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attaccagtc aagtgtcaag agttcaacaa ccggcgcgga tctgaaaact agtttttgca 120
tgattcgcac actccaaatc ggcattcatct aattaccata tcccaggttt gtttacaatc 180
ggctgccaga tgtgcgtgcg gtgcgtttgg agcttcaaga tgttctggac gtccggggta 240
ctaggctcgg gcagccggca ctagctctca ggccagctgc tcaaacattc tgcagctatt 300
tgggccgccag cgagtagaac gatattgcca aatattttat aatagtaacc aatagttac 360

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cagtatgacc ggcgcgataa cgatagaaaa taccacacgg tctaaaagta aataccattt 420
gggggtattcc ctaatctttt gaattattta ccggttaggtt tcggtcgttt ttttttgtca 480
gctgttcttt gtatgaaacg gattagtaat tttatttggt gtttttgtgc atttttgcat 540
attaaaagcc ttgaaacatg ccttaaattcc gttaaaatag attataagaa ggaatggact 600
gtttgtttta acccattgg 619

<210> 556

<211> 295

<212> DNA

<213> *Drosophila melanogaster*

<400> 556

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ctcacttcgg gcaagcagcg ctttttcgac ttcgactctc tccggtctcg cttgaggtaa 120
aaataataca acaggtaccc cccctatacc aagaccattt gtgtataagt atgtgtatgt 180
gtattcagta tctctcggta tccatcgatt cgtgcgcttg tgtgagactt ttagcggctg 240
gcaaatgtca tgatttcccg aaatacgtca tcagtgtgcg cgaaaaaccg tgcgg 295

<210> 557

<211> 203

<212> DNA

<213> *Drosophila melanogaster*

<400> 557

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gcctctggaa cgccgtcgcg gaggccaccg gaatggatgg tgagtgcact gagcgaaatc 120
gggatcaata ttcgggtcaa cacaaaaatc caattggaac taattaaaat tataatattt 180
ttagattatt taataaattg tta 203

<210> 558

<211> 202

377/586

<212> DNA

<213> *Drosophila melanogaster*

<400> 558

catccgacat ggttttatattt atttgtttat tattttgcag attttggcgc aaattttggg 60
aatcgttggg aatgtcactc cagtaataca ctgcacgttt ttcactactg ttccacttgt 120
ttttactccc tgtgaatggc acgtctaacc gttgtcgata tcgcaaaagc atgctatggc 180
agccgcacaa ccaactgaat tc 202

<210> 559

<211> 311

<212> DNA

<213> *Drosophila melanogaster*

<400> 559

caccaaacgc aagttcgccg acgattagtg gtgggctaag atcgatgtat tcaccatcgt 60
cgtcactctat ggttttttct ttgctttata cgcactttgc cctgcgtata ccccttttta 120
acagcgaagt gaactggaag gaaattaaaa atatattgtg ctgtgtgtta tactaacagt 180
aactactaat tgctaccgtt tttaaattata cactaaaaaa ttgttttgtt tttttgggat 240
tgagttttca atttcctagg ttgaaaagg aaatatataa tcaaaattgt atttggatct 300
aatttaataa a 311

<210> 560

<211> 511

<212> DNA

<213> *Drosophila melanogaster*

<400> 560

agcccatcta ttgaaagccg aagatgtttt cctcccgggt cccgacttca taacaaaaaa 60
aaaccagtcg cgtgtttatt aataaccaa atatgcacac aaccgcgcac gaaattggtc 120

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aaaataacaa acagtgaaat aaaagatatc ggaacttcag gttgattgga tattaattcg 180
gtttaagttt gataaagtaa tgataaaatg cagttaaatt gttatatctg tgttaaacad 240
tggtataagt tacttccgca tgattaaggc gcgtttgctc caaacatata tccagcacia 300
agcatttggtg ctagtttaag tttaaagaag caatctgaaa gacgttgaca ttaaacctgt 360
ttgaaaacgt gcatctatta ttatatgttt ttagaccaga aagtttaaata aaatttggtt 420
aattaaacat acttgcaaaa catttaagtt ttgctccact tttttatagt ctttttatgg 480
cattaaaatt tcctactttt aatttcgaat t 511

<210> 561

<211> 354

<212> DNA

<213> *Drosophila melanogaster*

<400> 561

gccgcgectg cttggcgcgc tttgttgccg gttcactttt ggccgctgcc gttgtcttga 60
gaggetctct ttttttgctt ggctgcttgc gttttcctgc ggtttttcgc caagtgttta 120
tgaagatgat gatgatgcaa ggattcgaca tccaatcatt tgcataatga tacacacacg 180
cactcactcg cacacacact cacacagcct ccaaagtgca tcgtcgagag gagagaaact 240
gaatttttca ctgcctctcc ggcgaaagtc cggcggcaga tttgttggtt ggccaagaag 300
actccaatat atattttgcg gggcgctttg gtttttgggg cttttcttaa ccca 354

<210> 562

<211> 505

<212> DNA

<213> *Drosophila melanogaster*

<400> 562

gccctgtctt tgtagacttt gaatgggttt ttgaaaaaga tgtcgagcac aacagctttt 60
aattgccaaa gtaatattaa gaatattaca actgactatt tggcctccga gtaactttta 120
ttcacaaatt tateggtttg ttcgttagag tgaataattt aaaaaaatat ataacttttc 180
agcgcggaac gttattaaat aaacaattta ccttaaaaga cctcaacaag gtgaagtgtg 240

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aagtataaaa tattaaaact ataaattttg cagaatctat ataattgacg atgcgcaagc 300
aaatacactt caaataatag agatttatat ttttatgcaa aaatatttat gctaaaaccc 360
actatatcac aatattaaaa attagagata tactgatttt tatttcgagc taaatcatca 420
taaataacaa ttaaatatgc atatttatat ataagcttgg gtcatagttc ttgaatttac 480
tgtcaacttt tttcgaatgc taatt 505

<210> 563

<211> 406

<212> DNA

<213> *Drosophila melanogaster*

<400> 563

tcgggggggtt ttttagttgc cagcaagttg gcgatcgcaa cggttcaccc taaaatttcc 60
gcgctcagtt gaaaatctct ccaaggagtt gcgaaaaaaaa aaactttgaa aacattgttt 120
tggaatgtcc acttggtggtg cttttgtgtg ttgaaataaa ataatagtta tctgcgaata 180
aaatattaaa aactaaatac tttctaaaac gtttaaacaa ctagttaaaa gtgcctgtat 240
aaaatggaaa ctacaattgt tactacaaca actacaaccg agttgaaatg cactatgcgc 300
ggcagtaaaa agaaagatgt taagctgcgt tccaaactct aaaaatctga cgttttcaat 360
tcagttagaa caaacaattg gctaaactac tccatggcca attaatt 406

<210> 564

<211> 368

<212> DNA

<213> *Drosophila melanogaster*

<400> 564

agccaaacag tcaacggcca ccgaatgcca taaaatacat gctgcacacc cgtgggcaaa 60
caattaggat aggctattac aatttataaa aattataaaa ccgttaaagt ttttaagtgc 120
ttaaagtaaa tgtctataat aatgcttaga ttatTTTTTTA ccatttctat tgttggaact 180
aattgataat actttgaaaa atcaaaattt aagatgagta ataagtagta agtagtttag 240

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cgatagaaga ttaatttttaa gaaaaataaa taccttacct taatccattg cttattccca 300
atctattgac cccagggtgtt ttagcactca ctacacaca cacgttcaca aaaaatgggc 360
agaagggt 368

<210> 565

<211> 278

<212> DNA

<213> *Drosophila melanogaster*

<400> 565

gtccgaacga tccgagagat gaaaaagtaa aaaagtgttt gttttgtttt ccttcctagc 60
gatggcacgc gcatcgatgt tggctcgata ctttcgctgg cgcttgggat tatatacttg 120
cgctgttttt tctcttcggc gctggtacgg tcataccgog aattgtactc tctgagattc 180
gagttcgaaa gtacgttttag catatgcagc aaccaactaa gagataaaat tcgaaatcaa 240
gtttttggcg ggggtttattg atatagaaaa tagacttc 278

<210> 566

<211> 290

<212> DNA

<213> *Drosophila melanogaster*

<400> 566

ggccagggtat cggggctgtt cggaagttca ctccatgtaa tatttactcg ctggcagtgt 60
gcgattgcta ttgcgacggt agccacactt gaaccttgcc tgcgccgctg acatcagaca 120
aaaaaaaaaca aggttcgggt tcagatttgg gtcttggggt cgggatctcc ggatctgaat 180
cgagtcgcat cattcccggt gtccgggaat agccaagagc caatcaggcc atttgccatc 240
ttcgtgcact gcacttgacg ctccggcggcg gaaagttttc cgcactgcac 290

<210> 567

<211> 739

<212> DNA

<213> *Drosophila melanogaster*

<400> 567

gtctggctgt tgttcttttc gtggtgaacg aattttcggg ctgagataca ggggtggttcc 60
ggccccgtcc ctcttaactc tatttttggg ctaactgttc ttatcgctga ccaaattcat 120
tcacctttcg aattgtgtgt tatctccgcg ttgacagcac acacacacac tcgagcatta 180
gcataaaaca cacacacggt cagcagtcgc tctcccattt acataaggcc aaaaaggagg 240
aaagaaatct tttgaaaatt gagcgattcg gttggccttc tagctttctg ctttctcage 300
gacaaaaaaaa gaacagaaaa acaaaaaccg gctttaagtc cggcaaagaa gccacatcgt 360
ttagctagcg gtgttctaaa ttcgattaat tatgattttt acgccacggc catcaataag 420
tggtttaatt ctctaatgc ctttccagct tttttgccg atggctctgc cttgttecta 480
attcaattct aattagacaa ttgagtgcgc gggctccttt aagcgtgtgt gtgtgtgtgt 540
gtgtgtgtgt gtgtgtgtgt gtgtgtatgc atgtgcgcat atgacgtcat tgctgaggga 600
gcataacttt gagaacagtt caaactccat agcacgacct tccctttatt ctctgtgtga 660
agactgttaa ataaaacttc tttattatgc tcgaagtctg ccctgagcaa gcttactgt 720
atttttcgt tccgaattc 739

<210> 568

<211> 766

<212> DNA

<213> *Drosophila melanogaster*

<400> 568

atacaaagca aaccaaacca aaaaccgaa aaaaacgaaa gtgcgtgcga tgaatgagca 60
aaattgcgca aacgategtg aatgcttcac actgttcatt gtttcggttg tttttttttt 120
ttttttgggt cttctcttca agtgggtatt caactttagg taacaccgta attagattaa 180
atattttgta caaccgatta ctaattttta attcgtcctt gcttagtaga tatccatgat 240
cacatgaact cttcacattg aaaaataaaa aggttttacg aagttaatt acgaacatta 300
taaagttaat atgatataat gtcgattatt aatgctaata ccgttgtaag tcaattactt 360
aacttttagta accaatttaa ggtcgaaata tggaaaaaat atttatacct ttaattgaaa 420

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aaacattatt aggggtagtt caagactcga cctttaagcg tttttgtgta gtttttgtct 480
gtgctcgccc tttagcatt ggaaaaaagc tgccaaaaat atcaacagaa gcctgagaaa 540
gagacgggaa caacaggagt gcgagagaga gggagtgagt ggggagtctg aaagcaaaat 600
acaatgtgcg tgagcttttt tttttggttt cgtttttgtg tcgttttcag cgttttttgt 660
tgggttaggt tcaatactga atagttttcg tctttttttt cgggtggata aagtgggttg 720
attaaggggg atgtgggagg ggatgggtgg aagcttttgt gcgtgt 766

<210> 569

<211> 700

<212> DNA

<213> *Drosophila melanogaster*

<400> 569

ccctgttcca ggtgttatgc tgtacaaggt aataggagtc gtgtcaactt acaattgttt 60
acagtctgat ttcttatagc ttgatatttt atgatcttaa gaaccagttg aagaaagtac 120
gacgttcgac gaataaatcg taataaatat tttgtgaaaa aagtttcttg gttatagagt 180
tagacatagt cttatctcta aaaatgcatt attttccagg ttccagtttt taactttcta 240
ataattcttt accattaccg aaagttgaga cccaatttgg cttactcgct tttatagtcg 300
acatacccg ctaaaggagg gtaccaaag cctgcgagta gagaaccaca acatgactct 360
gtcacgtttt tcatttgctg actgaacgga gagtaagaga acgctctctt agggtgagag 420
cgaaaggggg gcttgagcgc cacacaagag tcggcatacg ttgcgacgtc gactcgggca 480
gcgacgcccc cgcattggtg gcatttggac tctctttgga gccattctc ccgctctctc 540
tctcttgctc tcagactaag tgtcagacct ccacgtgtgc atagtgggtg ttgctccact 600
gttgttgttg ctacaatatt tctgtttgca cttgtcggct ttgtttttgt tgtttatccc 660
attctatcac tctctggcat tctctagaag cagcggtcag 700

<210> 570

<211> 484

<212> DNA

<213> *Drosophila melanogaster*

383/586

<400> 570

atgtggccca tgaaattggt acgcaaaatc actgtttgat tttcgggggc cgctggacgc 60
actaatccga ttgtgcagtt aaccggggcgg gattaatcca atgaaaataa aacacttttc 120
tttcgtaaag gcagcacact cgcacaaaac aacatgcgaa catatacaga cagactgcaa 180
ttaaacaggg ttgccatgcc gtttgaaacg cgcacagcag cagaaacaca gtttgcacat 240
tactttgatg tttattgttt gttatttttc cgcttatccg catataattc acttgcttgg 300
cccttttcaa tatttttcaa ttgtacagcc aatatatttt ttatgatttg ccctggaggg 360
ggcaactctg ttcggggata cgggcacata catagaaacc agcgagttgg ccaaatacaca 420
cacacacact cactcacacg cgcgcagcgc aaaagaaaaa ttatactgtg ttcctatacc 480
aaaa 484

<210> 571

<211> 497

<212> DNA

<213> *Drosophila melanogaster*

<400> 571

ggcggggcaa cagctgaaac aaaccccaag tgttatcgat ctatcgacga agtggtatcg 60
acattgtata cccgctatca agttcgggtg gtgtctctgc taagttggga gtgtgtacta 120
gctatttaag ggtaatttga aattcgaaac ggggacttcc cgaaaaggta ataagcagta 180
atattaacgt ctttctatgt aagttgaagt atatttattt aagttgcaga gagacaaatt 240
gttttagcta atagcacttc ttattgcacc aatcccagat acatccgtcc attgcattgc 300
aaccaaattc tccaggataa atgccacaaa agtcctcgat attcatgaag gcacagcttc 360
ctttgggaca gtagtaactg tagcagcccg gtgagcactt atcccgtgg tgatccttgc 420
agccgggaaa tccaaaatgt ctgtggaaac acaagaatgt attaatgac ttgaaaccat 480
ttttacctta tctctcc 497

<210> 572

<211> 373

<212> DNA

<213> *Drosophila melanogaster*

<400> 572

gttcagtcgg tcggtctecg ttgagttttc agtatagttt ttggccgagc tcttggtgtgt 60
tttcgtcgtt gtcggactga caaaaataac tcaaaaatgt cattcgccca tcgaatttta 120
acaaacgagc agcggagaaa agagcgtcgt cgccccagaa agaggggcta aaaataaggc 180
ggcacattgg cactttttta ctcgtagttt gctggtggcg cagtttggtg cttctcctgc 240
atcggcttct gcttcttcag ctctgatga tgataataat aatgaatgcc gatgcttttt 300
atatagatag attgcataga tatatctctt ccggtgggca cccccccgc tatgctatat 360
atacatcccc ttt 373

<210> 573

<211> 1306

<212> DNA

<213> *Drosophila melanogaster*

<400> 573

gaattcttcg tcccctttga gatttttgcc attctaagcg aaacgcacta gaaaaacggt 60
cgctgtaagc ctctgcctgt tcgtcttctt ctccctgct ctactcttct ttcttttagca 120
cttcgagtgt tttcgaaacg caaaaagaaa caaaaatatt ttcgacgaaa atcggaacgc 180
aacactgcca actcagtcga cgacgagtcg tcgctgttgt tgcggttgtt gttgccgcca 240
tcattttattt tttcgtcgtt tctttttttt cctgctacgt actacaaaat taaactcgaa 300
cgaaccagcg aacgaacgaa cgaacgttcg cttggctecg tgcttttgga acggcaaaaag 360
ttgcgatatt acgtccctcg ctatcaacag cacagcgatg gcagctctta ccctgtacag 420
tgcatataca cgaacaagcg attttaatac atgaaatttt actgtgcagt atacacacac 480
acgcatacga acacatgcct acatacatat acagcacact ggttccatca tcattattta 540
ccagcattcg ctttggttgtt ttgccctcgc tcgctctctt cttcttctct ttgccttcct 600
tctctctcgt gtcactctcc ttaccctc tcggttgag cggccatac tttattttta 660
actgtgcgac tgtacttcgt gtgtcggtcg ttcggctcgt tcgcttgtag atgtttttac 720
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agctgtggat gtacatacat acatacatat gtaggcattg gatgtggact ggagtctttg 840

ttgggtgggg ctgtatgtac ttacatacat atataccac agtttttttc atggatattt 900
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tagctgttgt tgccctgtac actgcgcgac gtgcaatttg cgcagtgtgc tgctgctctg 1020
acaattgtta acggcaattg ttgttgctcg ttgcctgtag ccctgggtcc gattcggagc 1080
gattagcgca cttgacgcaa tgctctggct ctttggtctt gtctgctcta ctgcttctct 1140
tgtcttatca gctggctctg gtgataagag ccgtacggca aaaatttttg catgcagatc 1200
gatgatcatc ggctatctgc ccagtggaga agcagctatt gcgttcggga aaccatcagc 1260
tggggatcct atttcgcctt ttattccaat gttcaaagac cttgat 1306

<210> 574

<211> 603

<212> DNA

<213> *Drosophila melanogaster*

<400> 574

aaagcaggac ctttgaggaa ttggtgagtg ttttcataat taatcaatta gcttttcaaa 60
gttatcgttt aatgcctttt gatcggcatt taagtcttgc gtaagtgtgc gtctgctgcg 120
gcattttcgc tctcagtcgt tcgctcgctt ttgtgacgtc atcgtgtcag ggaataaaga 180
aaaagttgca catcaaaatt caagttgtta atttaaaaaa cattacaact aaagacatca 240
atcattctga ctgttaaatt aacaaataag taagcaacta ttttaattaaa aaggcagcaa 300
aaaattgcaa aaattcgtaa aagactaaag tggaaagcaa aaattctaaa accctcgtaa 360
aaattgtaaa ttttgaaaaa tcttaatttt ttaaacaaat gctttgtaat ttagttttta 420
caattagctg caaccagcgc acatttttgt ttctcacaca tacacatgcc atgcgcacag 480
acacatgcaa gcaaccacca ctttgccttg acttgtgcgc gagggaaacga gacaagcata 540
cgttgttgaa gctatcgcac cgtttatcgc ccaatcgata ggaatacgtt aaattttgat 600
ttt 603

<210> 575

<211> 392

<212> DNA

386/586

<213> *Drosophila melanogaster*

<400> 575

ggcggaccga ccaaccgacc gcttttagtt cgattccaac tgccggcaga gtcggatgct 60
cagccacgtg acttttgaat ttcgatcagt taattttctt agtgaattgg gaattgtgtc 120
ttgtgtatgg tgtgcattca ctaattaaaa ccttttagtcg aaaaagcaaa taactcgaga 180
agtggcccggt cgatcagagt gaaatattat ttaaaccggtt ggcagccacg ggggaattat 240
tagtaatttt taagacgcga aaacataatt agtttcaaac aaaagacaaa gaaaactgga 300
ttttcggaca gcacacgaaa atatttccga gctatccggc tataaatatg catgagcggg 360
caatttatgg tcaaaaccaa acaataaaat ta 392

<210> 576

<211> 375

<212> DNA

<213> *Drosophila melanogaster*

<400> 576

gtatgaggta gttacaataa cgattctaac agggctcgctc gctttaccaa aagcggttcag 60
ctgacctcct cgaaccaagt atgtaggtat gtatgtatgg gaacatatat atatacatat 120
atacgttata tgtatacgaa aaacgaagta ggggaaagcc tcaaactcga atacaaaaaa 180
ccttgtaggc gaatttttgt gcgataatat aatgcaataa atatttaata tttaatgtga 240
agattgcttt attactctta caaatctaa caattttaaa caatcattat ccaatccact 300
aaaatatcct atccccctt caaaaaataa ccaaaacgctc tccaatttat tcgaattaag 360
ggccaattt ttgga 375

<210> 577

<211> 322

<212> DNA

<213> *Drosophila melanogaster*

<400> 577

387/586

gattcgccat tcgcctgctc tctcgcttcg tgtgtcgccc caccaaatac tatataacta 60
taactataac atacaaaaaa aaaaagcaaa gaaaaatcaa atcaaatact actactcgaa 120
acaacaaaat cgagcacaca ctcgaaaatt atatacaaat cgtaaggcaa ctaaaatatac 180
aagcaaacgg catgtggcaa caaagagatt tgtgcaaatg aaaaattttt aagcaccaaaa 240
aaagtttgag caatttttta cgcaagccag gaaggaatcc gtatatattta taatcaattc 300
aatcaaatc aaaatacata aa 322

<210> 578

<211> 262

<212> DNA

<213> *Drosophila melanogaster*

<400> 578

gtgtgtataa ttgattctga tggcggttct tcggcctctt cctctctctc tcactcttct 60
ttagttcttc tgcattcttg gtcgccctcc cacttactca acttaattgc ttctgtggca 120
ggagcaaacg agagggggga tggcgacttc ggcactcggc tgcgctattt ttactctctc 180
ccactccac tttggcttgc atcttccct gcattgtgat gcactggctc tgcattttcc 240
aggggcggat ctggaggcta gt 262

<210> 579

<211> 783

<212> DNA

<213> *Drosophila melanogaster*

<400> 579

cactggctca ggtgaatgat gccacggtga acttgttcat cggttcacta gttcgcgcg 60
cgagtgttat tgtttgtttt gccgtcgctc tcgcatttcg tctttgttaa tttcctcaaa 120
aagtatactg cgtcttgtgt tcttcgtggc ataggttagt caaaaacata attaagtcac 180
gttgtgtgaa caattcaccg tgaaatttga ccagcaatta tattcccatg tgctatgcaa 240
tagcaacaag tgttgtataa tacgcttttt atcgggtcta cagtcattac tagttaactt 300

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tgttgtgtat ttacattcta cgagcattta ttaaggcaca tttgataaga tataaacaaa 360
ttcaatcgta actcctctga aggttgtgtt tactgaactc gcgcgtgtcc taacactgat 420
caattggact agttgatttc aaaaaccatg agaactttac aaaatctgaa aacaaaaaaa 480
aaaataaaat aattccaaac ttaaataatta tattaatatct aggtttttatt aactatatgt 540
acggttctaa attatatatg aacgaatcaa gccaccacca ttacacattt tgcaacacta 600
attgaccaga aaccagtggtg aaaattgacg ctgctgatat aatttaaaag tttagttaag 660
gaaaaattaa atgttcttac tttgggtttt tcaacatata ttatcataaa cttgtagctt 720
aataatacaa aatgtagcta aatctttaac tcgttatccg tgatgttaag gaatgttgaa 780
ttc 783

<210> 580

<211> 316

<212> DNA

<213> *Drosophila melanogaster*

<400> 580

ctctacacct ctgagctcct ggggtgaggc actatctggt tccgtctcct ttgtggctat 60
ttttaagacc ttcttttaggg caggggtgtgt gtgttcgagt gcgtgtgtgt gtgtgtgtgt 120
gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt 180
gtgtgtgtgt gtgtgtggtc tatcgctaataaacaatag ctctcacatt tctgtcaccg 240
ttttctttgc actgtggcca taaaatgcct tcaattttct aacttagatt cacattgtct 300
tattatctat ttgcat 316

<210> 581

<211> 511

<212> DNA

<213> *Drosophila melanogaster*

<400> 581

gtccggggat ttttcggagc cgtcaacaga aataaacaac aaccggactt gagatcgggt 60
gcgtactcac ttcagttggc atcggacgtt cgtcgtgcga gggatcgatc gcggttgtgg 120

gtagtgcgat atagtgaaaa catctcaaga tgccgaaaac agtggtagtt actcaccag 180
gaaaaccgat aaataacgag aaaagatttc gcttcgagct tctctatttc tgtgtgattc 240
ttctaattggt tgtgggttta gcagctggct atttcatgtg gatgatgtgt gagtcattaa 300
agcgaatcgt agattgaata caatttaata accaataacc aattgttaac ctggtttagc 360
ctactccaca cattcgccga aacaagggcc tacacatact cgatcgagc gaaatggctg 420
ggggaaccac ccagtgggaa attaccgcac cttaagcttc cccgtctccc aatattatca 480
ttcatcacac ggcaaccgaa aggatgcgac a 511

<210> 582

<211> 168

<212> DNA

<213> *Drosophila melanogaster*

<400> 582

ctctgacttg ggctcatgaa tcgctttggg ccgtgattca tgcgtgtctc tgtcttcggg 60
tctcggaatc tcacacaaca cagcgatcgt gcctctcttt ctggtcgtgt tccaccgtct 120
cttacctct atttccgctt gggttcaaca agttgccata gccgtggt 168

<210> 583

<211> 490

<212> DNA

<213> *Drosophila melanogaster*

<400> 583

gcctagatag cagggaaaac tagatagaga gtgatcttct cattacctgc atcgtgaatt 60
agcctcttta aacttcttgg gacgctttct gaatgaatat acgattagga aaatgtgctg 120
attattgggg catgtattag ttgaaaaccg atattgtcct ggataagact gttgttaaaa 180
atagatttac ttttaaattt gtttagttgt gaagatcaca aacataatcg ggcgagtga 240
taaaattaaa taccgaata atactcatga tcagtgcaga catatccaaa aattaaccat 300
tatgttatac ttttcgatta catttattta tcttgcagat cctaaggata tgcttaaaaa 360

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ttaaattgta aaaacaaaa ttgtttttgt ttttccttat taataatcaa gttgacacaa 420
caaacttttag ggctaaaggg aagttacatt ctatttaaca aaattgaaaa atattgaatt 480
tttggcgcca 490

<210> 584

<211> 409

<212> DNA

<213> *Drosophila melanogaster*

<400> 584

ctctgctcgg taactgttcg tttgtacata caaacatttc acataaacat atataaatat 60
atgtttaata tatatttata ggcaagtgtg ttaataccaa agtatataaa ttgcatatat 120
cgccaaacca taactcccc ccgtttctgc atttctcttt tttcttgagc tgtaaagcca 180
tttacatact tacattacat attaaattgt attttagttt taatccaata tggcagccat 240
tttgtatcaa accattcttt caacttcccc cgtccccctt gccctgccgc tgctgccctg 300
tttttggtcc gccttttctt gagttcacct tcttaattca cctagatttt caaatatttt 360
tcggtgatgt taatttttgc ggccgctcgc cccttcgccc tcctcttct 409

<210> 585

<211> 705

<212> DNA

<213> *Drosophila melanogaster*

<400> 585

tcttgccaa attattcata cctcttacac gtgtttcaag ttcattgcc aatttcggca 60
cgaccacagc cgtccagaaa gagacggcca cattgtgaag tatagagagg gatgtatagc 120
acttggtaca gacttttctg ttgggcgggt tcttttctgc ccggttttcg cttttctggt 180
ttggcttatg attccgtcga gctgagttgg caaaaagcat tttctgctcc ctgggactga 240
gtgactgact aaccgaccga gctagcaaac tgctgatctg gcaagaagat atccatattt 300
gtctttcaac atcagttggc ttatgtagat ttggaagtct aagaagtgat cgcaactcca 360
agctaaaagc gattgggtta ggcaataata tttgtaagtc gaatgttag agatacgaga 420

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agcaagttca aattctcatt ttagccagga aagtaatata aattttataa aagtgggaag 480
tctcttctat ctatttctaatt attttaaata gaaaacaata ttttttaaat aatcagatgt 540
gttagatata aatataaata tagataagga tttatatatg tatatgtcat taaaaattga 600
tttcgaatat ctcccacact ttccacaaa gactggccat ttcttttctc cttcctaact 660
ttttgaattg ctgcggcgat ctccatttcc atatttgact actta 705

<210> 586

<211> 424

<212> DNA

<213> *Drosophila melanogaster*

<400> 586

gacctaacga cacatcacac aaatctctct ccgctcccca tactcaactc aaacgggcag 60
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gctctcgctc gctcgcgttg gtggggcaag accttctgac gcgtttggct ggtttgccac 180
caccactgaa ccaccaccac cagtgcaccc agtataccca ccaccaccac cactgaactg 240
aaacagagtg gctgctctct cactcaacga agcacactca ctactcatc caatccaact 300
agaaccogtt tgctcttatt agctcgctgt tgggcgcac tggtagatac ttttaccggt 360
aaggtctttt atcgccggac ttttcggtt cgggggctct aacttttttg ccaatttggt 420
taaa 424

<210> 587

<211> 230

<212> DNA

<213> *Drosophila melanogaster*

<400> 587

gtcaagcaca ttacgtaca tacacacaca attacgtgtt ggtggctatt gagtacataa 60
tatatcattt ctattttggt ttccggtagt taggtaggta ggtggatgac aagtgtgtt 120
gtcagagtga aagaggtttt caccttgatg cctgatgccg ttacacacgg cgtatgggcg 180

392/586

atatattgat tatgagacgc gacttacgca tctctttcat tcgatctatt

230

<210> 588

<211> 480

<212> DNA

<213> *Drosophila melanogaster*

<400> 588

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aaacaagttt ttacgattac ataaagtcgc gttccgctgt cagcaaactt gctctcgttt 180
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tattacttcg gtgaaactcg ctgccgactg cgctgccggc gtcgaagctg aaacgcctac 300
gcgcctgcgc acctagaaaa atatggattt ttattgcaac acctagcca agcaccatat 360
ttaattggaa atcgatatct agagcaaact atccatatct aagttgatgg actggatttc 420
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<210> 589

<211> 294

<212> DNA

<213> *Drosophila melanogaster*

<400> 589

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cttccgattg gacgtcgcaa atgcaattgg agagttctgt ctctgttctg atcagagttt 120
ccgctccggc cgcgtgtgct agtgtgtgtt tttgttggtg ccgtaaacaa gtttagcaat 180
gcgtttcaaa tccgcgccga ttgtttcgct tattgtcatg ctcgatttaa ccgcttagag 240
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<210> 590

<211> 460

<212> DNA

<213> *Drosophila melanogaster*

<400> 590

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ggctgcacgg catacggtcg cgggacgtct ggaatgaata ccaacttcac tcagttcctt 60
tctggctgcc gtcgaacggt gtcgtcgttc ggttgaatcg aatcgaaaag cgcagctcgc 120
caaaaagcca ggccaaaatc tcaaagccac ggctcagtga aacagttatc agaaattttc 180
gaaaaatcgc gtaaaaagtt ttcgaaaaaa aaaataataa ttaaaaacat aagcaagcaa 240
ccgatttcaa gtggcaaaaa taacaaatta gaaaaaaaaa acgcaaaca aacacagcac 300
atTTTTtTgga ttaagtcca catagttcct gttagcagca gcaacacaca ccaaccactt 360
ggattactat aaacaacagt attatcactt aaaactagca caaaaattgc aaaattttct 420
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<210> 591

<211> 485

<212> DNA

<213> *Drosophila melanogaster*

<400> 591

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gcccgtccgt tttttttcgg ttcgttttcg ccgcagtcga aattcgtcgt cgtcgccgtc 60
gtttgcctcg ctttttgcac tttgcggtcc gttcgaaatt tttatttttg atttaacgcg 120
agctaccctg ctatatatac cactatatat aatatccgtc tatatgtgct accatatcga 180
aatcggttct atttatcggc acacacaaat aatcacattc ggatggccaa cgtaatttga 240
catcggccaa taaataaact aataaagtac aaaaaaaggt gtacaagttt gaaaaacgct 300
gagctcatta tttctgccta attagcatat aaatcgtaga gagaggctct aagtcggctg 360
taaagtgtta taaacaaaat aaaaatatgt ttcttccatt gggaaaaatg agtggttgatt 420
gctaatcggt aattccttag caatttatag tgcaataaac ataaatcggt accagtgcga 480
tagtt 485
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<210> 592

394/586

<211> 300

<212> DNA

<213> *Drosophila melanogaster*

<400> 592

gtatcgccctt ttaaagtgcc aaaaatggag agagaccgaa gagagagaga gagagagcga 60
gagagagaga gagatgatgt ggtcctcata atatggtcac atcctgcatt caagtggcga 120
gaaatgattt taaatatttg tggctcatgc attttaattg gcatttgcaa acgtgtgtgg 180
cctacaaatt gaagtacttt ctatacggat taaaataact attttgtgtc attgcgttgg 240
cgtgtaaatt aatttaaag agcttcgctg gggattttat aatcaacatg aatcgaattc 300

<210> 593

<211> 184

<212> DNA

<213> *Drosophila melanogaster*

<400> 593

cgctggatcg tatagtgggt agagatgggg aaaacatcga tggtgctgag gggatcgata 60
tatcgattgc gtttttgact actgtcgatg attgcaggcg ttagtgcctt ttggccggtt 120
gtgctttcac cctctctagg tttaccgggt cgctgttaac cgttacaggc gctcttttta 180
tttt 184

<210> 594

<211> 866

<212> DNA

<213> *Drosophila melanogaster*

<400> 594

ggtctggcga actgaaaaca gccaaaactt ttcgcctgcg ccgacgtcga cgtcggcagc 60
gcagctgttt ggagctgttg gggctctgtt aggcccccac gctgttaggg ctctgttagt 120
tcggctgctc tctctgtttg ttatcagtgg cgtgcgctct tttatcaaatt tggaaagggg 180

at tt t t g g a g a t c a g a c a g a t c g a c c t g c g t t a a a c t t t t c a g c a t a c c g g a a t a t a t t a g a 240
a t a c a a t a c g t t t a t a a g g g a a t a a t t g a a a t g a t t t t t g a t a g a a g t a c c a a t t c t t t t c a 300
t a g a a a g a c c t t t a t t t t g a t t g a a a t t c g a c a a g t t c g a c t t t c t a t t a g c t t g g g c t t a 360
g t g t t t t t t a a c t t a c g a a t c a c a t g a g t a c c c a a t a t t t a t t g t g c a t a t g t a c a a t a a 420
a a t a c a t t t t c t g c a a a t g a c t c a a c c a a g a t t t t t c g t c t g g g t g g g g t g g g a a a t a t a 480
a a a a g t a a a g a g a a g t g a t g g a t a t t t t c a g t c t g t g a t t c g a t t g a t t a a t t t c t t a t 540
t c t g t g c t a t a c a t t t t a t a c a c t a a a g g c a t g a g g a a c a g c t t a a a g c c t g a a a g t t t t 600
g c a t t t c a a a g a a a g t g t t t a t g a t g a g g a a t t t t g g t g g t t a a t g t t c g t t a c a t t a 660
a t g c t c g t t a c a t t t t a g t t a g t t c c a g c g a a g t a c t a a a a a g g a a t a c t t t t g c a a a a 720
c g t g c t a a a t a g t t t c t a t a a g t t g c t t t g t g t g t t a c c a a g t g a t t t t t g c g a t t a a g 780
g g t t a t c t c t t a g g t t a t g c a t c t g c t g t c t g t c g g t g c a a c t g a c t t t a c a a t a t a g t c 840
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<210> 595

<211> 352

<212> DNA

<213> *Drosophila melanogaster*

<400> 595

g t a t t a c a c t a t c g g a a g a t g g c g a t g a t t g c g c t t c g t c c a c t c g c a g c a g c g t g a t 60
a g t c g g a t t c c a c c g a a c a t t t t a c g c t a a a t t a a t a a a a t t t a t t a a a a t t c a t t t c t t 120
g t t a a a t t g a a g a a t c t t a a a a a t a c t t t t c a g t t t a a t t t a a a t t a a t a a t a a c c t a t c t 180
a a a g a c c a c a a t c a g g c a t g t t c c g g t a a t a g t a a t a t c t t t t c g a t t a c g a t t t g g c a a 240
a a t c t t t c g a c t t c g t t t t t a g g t g c t c g g g t t t t c g c t g a a t t t t t g c g a t c g g a a t g t 300
t t t g t a a a c a g g a a c a g a t g t c t a a g c t g t a t t c c a g a c a a c g g a g c g a c c 352

<210> 596

<211> 846

<212> DNA

<213> *Drosophila melanogaster*

<400> 596

gggttagtga gtgagagccg ccgaaaacaa ttaaactaaa tttttgtgat atttgaccgg 60
caagtgaaaa ctttcggcctt gttgcttcgt tttctgactt ccatgcgctt tatcttcgct 120
atttgtttgt gctttccacc actgaaagtg tcatttaagt ggcattttca cagtcgctgc 180
gttttatttt acttctctcc cttttgtcgc cgattgttta ctccacgcat acacaaacac 240
acgtctcttt tatctatttg ttgttaatct cttcgttgct ttttctgat tgetgattca 300
cctccatggt tctggtgtcg tcacgtaaaa aatacacttg aaaaaagaa ttatatctat 360
tcaaggatgt aaaagcacta cggcacattt gctttatttt ataatagaca atataatatt 420
aaaatgacta aaccaataat gtgacgaatg tcaaaaagta gtgctatttt gctctgtgca 480
tataaattat cgttactcat cacttattaa atctgttggt ttccccattc gtaatcaata 540
cacacagccg aatgcaatga cgcactcact cttaaataa aatatacgag ataaactttt 600
actttgtgcg aggttcgggt tcttatcatt tttgccact gtgcatttgc atttcgaatt 660
gcttttggtg cgcttttctc tgctattttt gtgttggtcaa cgtaagccaa gcttacttct 720
ctcccgtct ctctctcttg ttttattctt agctaacggg tttctatttt cgatatcgat 780
tgttgccgtg cgttgttttc atgtctgtgt gccacaatcc ttatcaccac aaacaaaagc 840
gaattc 846

<210> 597

<211> 443

<212> DNA

<213> *Drosophila melanogaster*

<400> 597

gtctggggca gcacaactag ttatttattt ctgctgacgg atgtggatca tctgccacaa 60
cctatcataa gtcggetgca aaggccccag atcggggaata gtaaccacaa aagtattata 120
gtactacgga acctctacct cccctctgca ccccgctccg caattacttc atgcccttgg 180
accgctcttc ttcttcttcg cctagagggg gctcgtccag ggtttttttt taatggaatg 240
cagttgcaag ctggtttctg gaacggctta gcaagggtgca aaacccact gagtgctct 300
ctcttgctt cttataacct tttatagggt atcatggcaa tttaatgttt ttacgccaac 360
tacgataata gcttttatcc agtcttagac taaattgggt tacccttgat atctaacata 420

gtttatcaat tccaatagtt cca

443

<210> 598

<211> 402

<212> DNA

<213> *Drosophila melanogaster*

<400> 598

tttcggacta ttgagtgatt tccctctctt cggggaaatt cgagatggag agtaaagcga 60
aggaaaatgc aagggttggg gtagctggga aggcttttga tgggcgcggg tttgttgat 120
gggttttatg gctacaccaa gacacttaat tgggaaaaag cttcaataaa atgttgcatt 180
aagccattgt agctacgaga tcttaagccg agcaattgta atttgagaca ttttatttca 240
attattttta tttggcattg atattacaat ttcgaaaaat tttaaactat gtatgaacac 300
tacggggaaa ttaagttata tatattccca tattgggaaa tataattagg ctttaggtta 360
ttatctttct tttatagtta aagactttgt taattagcaa ta 402

<210> 599

<211> 513

<212> DNA

<213> *Drosophila melanogaster*

<400> 599

gtttgaagta aagttgagaa aatactaaga aaatctagat aagcagtgt ccaatatgaa 60
cagtaatcag taaattagt aagaatgcga tatgaaatag tacagatata gtacgcgagt 120
atccactgta catggcgata aggcagtttt ttgaaaacc cctccaaatt gaagttcaca 180
ttctttgttg ttactcgttt ttcgggttca ccttcatttt gttttatcca aattgcgtct 240
taaaaatgat ggaaaaacat atctatgcat gtgctgggtg tgcgtgctg tgtgtgtgtg 300
ttnngttnng taaacaaatg tgtgttgga tgggaaaaac aagagagggg agcaaagccg 360
gggcggccaa taaagccaga gtgcgaggcg caagcaacaa caagcacacg cgggtgcagtg 420
ggaaacacgt ttccgcttt ttgttgggt ttttcatgcc cttatcacc gttatgcgaa 480

398/586

atgctgcgtt aaccgaaaaa cccaattacg aat

513

<210> 600

<211> 600

<212> DNA

<213> *Drosophila melanogaster*

<400> 600

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atcggctagt atcaactcct tataaatagc ctctttacgc aatactattg aatacagaaa 120
aataagccat caaagtcagc attatttgca gtgtttgccg accacttccc cgataagcca 180
tacatataga gttacgtaac tggagatcgg cgactcgagt ggccgggctt tggctttata 240
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cttcagatgt gaaattgcta gattttctaga atcgatcaga ttttccccat tcataaactg 360
ggtctgcgac tgtggctaata cagcgcaata ctgattgatc gattggaagt gccattggac 420
aatttataga gcgatccata aatcataatc gactgggtatt tattgtgcgc tattcgcaac 480
tactcgagcc cagcttttag gggtttccgtt ccagctggaa gatctttgtg gggacgcaag 540
gcttctggga aaccgagacc ccaagaaaaa gatcacatga tagaaccccc ccatatgatt 600

<210> 601

<211> 571

<212> DNA

<213> *Drosophila melanogaster*

<400> 601

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ccttgagat cctggcacat cctgctcctt ggaaccttgg ctacaagcac tgatttgtca 120
acttttgaaa atgtcgaagt gttgtcgtgt tgttttcggg ggtggctttt ctaatggcaa 180
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ccgctggggc aaaaggaaaa agaagccctg ccccttgata ctgccacca agtttggtgt 480
tgtgtgtgaa tgtgttgggt ggggtgggaa atgccgtgtg tgtgtgtgtg tgtgaaatag 540
gcgcccctcg cccccacaac caaaacaaaa t 571

<210> 602

<211> 475

<212> DNA

<213> *Drosophila melanogaster*

<400> 602

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cgcgaaagagg cgcacaaaaa ggaagtaact aaaaataaca aacatctcgt ttgggtttgt 120
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acaaaccaga caccagaga tccatgcccc aaaactgatt gaactacagt gatcacttgg 240
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tacagtctct gttaatacat gtttaccata aatcccgcca gattctcgga attaaagtgc 420
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<210> 603

<211> 371

<212> DNA

<213> *Drosophila melanogaster*

<400> 603

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gtagaagcgg taagatcctt gcacgaaatt gataaacagc attgcatcag caattaggtt 180
tcgggtgtgt ttaagttctg ggaatcgaac aagataacca caatatttac ttatttatcc 240

400/586

aacttttttgc tctctctcac gttgttcaat aataatctcc acccgctcaa cagcaggtaa 300
atacgtccaa agttctacaa ctttctactg atgaaattca ctttaacacg gaaaccggta 360
tgtttttgc t a 371

<210> 604

<211> 488

<212> DNA

<213> *Drosophila melanogaster*

<400> 604

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ggcttggctg ccagatttca ccagctctat agaagaatcg ctgctgttca taggaaagta 120
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gtttggcttt ttggtactcc ttaggattcg ctgtagttcg cactttactc actattttcg 420
tggtctcttc cataaacgaa tacaacgaaa gatgtcacag cctgcgggga tgtgcctcca 480
gagcttgg 488

<210> 605

<211> 500

<212> DNA

<213> *Drosophila melanogaster*

<400> 605

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gtttaataaa taaaatgtat ttttaatcgt taatttttta ccaaggaaag ttttttaatt 180
taatttttct gtttacgata cgcactctaa tttgcagcat ttttgactaa aaaaaactta 240
aaaccttatt tcatagtgac aaaatgattc atcgcagtat ctgtaatctg tatctttctt 300

ttcacttctt gagattaacc attattaata atcacataat ataaaccact ttttaattcaa 360
gtaagttgtc agttcctgca ccccgaaattt taaatgttaa cgcataagcc cggggcatta 420
aaaacaggtt tggcagggct tgcgccgttc cattgcaaaa aaaattcccc gccacagagt 480
ttttccgcta ccaattaact 500

<210> 606

<211> 387

<212> DNA

<213> *Drosophila melanogaster*

<400> 606

gcccacatag tgtgttgccct gtgaatccag ttttcttttg cgacatcggt tataaagaaa 60
tcccaaagcg gcgaggtaaa aaacagaaac atcaaagca gagtaacaat tgggggtgatg 120
attcatttca tccgaaactc aaatcgtttt cgagacttat caaagcacgt taaaattgat 180
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gtaaagttgc agcatatttg tttctctgtg tggagcgcg taggtgagag ataaggatgat 300
tcgaaagcac gttcaccact cgcacgggggt ctgttttttc ttccagcaac ctctagaaga 360
aatcccacct agaataatac tagtttt 387

<210> 607

<211> 322

<212> DNA

<213> *Drosophila melanogaster*

<400> 607

ccgcagccca caggcaacac ctccggtggt ggtccactaa gtgcctggcg tggagtaatg 60
gaacatgggc tgggttctcc gtttgccgcc ggatggcatt tggagatcag ctcttcggtg 120
ctccggcggt tgcgccactt cgaccattt cgctggcccc atcggccgat ggcttggcat 180
gaattagcac cttttttgga ctttcttttt gtccggtctt gacgcatttt taatgaattt 240
accatggcca aataactttt actaggtgc gtgtctacgg gttattcgaa tccaactcac 300

402/586

ttctaaggcc ctgccacttt ga

322

<210> 608

<211> 590

<212> DNA

<213> *Drosophila melanogaster*

<400> 608

ggccaggcca aaaatacagt ggtcgtcgag taaataagcc accgattcag aatttccatt 60
tgtcaataaa gcccagcaac aacaaccag tatagcccat atatcactgg gtctggaaca 120
tacataaata tttttatata gtttatggat ccccagctc agctgtgtgg aggtgtaaga 180
aacaaaaagg cgaaacgcga aataaaaaac agtaaccaat ttcgcaaaaa gctcgccaag 240
ctgacagaac ggcaaaattg gaagagagta aagagcgaaa cgctgacgtc gagcagcttg 300
ttttaacttt tgtttaaaat ttaaattgct aatgaattga tgatgtcttc tggttctaag 360
aacatactaa gggggaaaaa gacgtgttat agggatatgg caatagaggg gagcaactta 420
taattaagag cttagcttgg cagtaaagcc ccacatgaag aaaaaatttc ttaaaaagtg 480
taactttttt ttttaaatac aagaaacagt ttatcttacg cttacttgaa ataaatctaa 540
atttttgaac tttttttgac tcctttacaa tgagaaacat gactaccctt 590

<210> 609

<211> 416

<212> DNA

<213> *Drosophila melanogaster*

<400> 609

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ctgtgtatgt gtgtgtgtgc tgcagcaggc gggctttttg tttttttttt tcgcgacctg 120
ttgttgctcg cttgataatg gcaggctttg ttgttgctgc tgctgctgtc gctatcagct 180
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gctggggtag ttgttgcccc tatagagagc acaccaacaa aagttacagt tgtttgtaaa 300
ttgttgctta ttggtataaa tgttggtgta attatcacta ttgttgcggt tacttctact 360

aaagttgctc ttgttgaaag ttctcgtcgg tgtaccgttt ggcgttggtg taacta 416

<210> 610

<211> 504

<212> DNA

<213> *Drosophila melanogaster*

<400> 610

gcccacgctc tcccacagtt accaaccgctc atccacctcc ctcttttctt ctctctctct 60
ctctatgtca tttatgagag ccaggccgaa cgaagagccg aagtttctgc tgccaaggca 120
aaagctaaag ccgcacttaa acaagaatgg ataataaaat ggttaaaaat tctgataaaa 180
attgatcagg tagaaatatt ctaagttata tgaaacttgt tcataaattt aggacattat 240
gcaaacgctt ttttttagtt catgaataat tggtttagca aaagtttttg ttgagtgtaa 300
tgccggattt ctagttctgt cgtggctcgt gcttttgctg ctgcctctgc ttctgtcgt 360
gcctctgctg gcggaaaact cctgggtccaa aggcagccaa aacaaccgct gacggatgac 420
gacttttccg actaacaacg gacgcgcatt tcccaccgt ttcgaggcaa gagcgcattg 480
aaatttgtgc gacgccagcg caag 504

<210> 611

<211> 879

<212> DNA

<213> *Drosophila melanogaster*

<400> 611

gccggagcgt tctgtttttt ttaacagata ggtaaacagt gtgaccgaag ctggaccggt 60
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ttagagggca aacattttga acatttaaac attttactac attagaatgc ataaattgat 180
tgaattaaaa tacggagact ggtgttttta atctgcataa tttttagtt gtagctagt 240
caacaagggt tctatcagtt ccaggaaaac gctttgttta caagcaaagt gctgattttt 300
atgttgatgg tcttaccctt ttgtgtaca aaattccggt gctaaaatcg gattaaaagc 360

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gcatgaagtt attcgtaagt agttgaaaat cgcactagag atgaatccta atgtttatag 420
ttttcagaac tatggtctgg cgaacgtaga tcaacgcccc gtgaaggacg aaccacttca 480
agaagacact ttcgaagaag aattaatctt cattttctaac agcgacttcg aagagcttga 540
aagcgaaata aagattgaga acttctgtag ttatggcaaa gatttggagc cagttaaagg 600
cgtcccgctg aagctgaaga cgtgtaaate caaaatagca aagaagcgcc ccttgcgaaa 660
gcaaacagat acgtttaagt gtacccaatg ccaaagacg ttacaagaa aggaaaacct 720
cgaatcacac ttgcgacttc acgcagaaga acgtccgttc gagtgttccc actgctccaa 780
gagctttgga cgcaggacgc attacaagcg acacttgctc aaacacgaaa agcgacctca 840
taagtgttcc cactgctcaa aaacctttac ccagaattc 879

<210> 612

<211> 443

<212> DNA

<213> *Drosophila melanogaster*

<400> 612

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cggagcattg atttgctgtc ttgattttg cttatgacct gaggtgctct cttacatata 120
tataaacgcc atcatccagg cagacagtag gcgagtgtaa gcgagagaga aagagcatgc 180
gacacacata cgcacacaca ttgacacctg gcgcaggagt cgcggcttgc ggcactttca 240
aataaattaa aaaatagcaa caaaaccaac agggagagag gcgaatagag cagtaagcct 300
ttccccagct tcctcgctca gtagtaacat tagtaagagc aacaaaaaca gggacaagag 360
agcaaaaata catgcctacc ttaacccaat taaaatacca tattatttaa caaagaaat 420
tgtgttattt gcaagcaacc cca 443

<210> 613

<211> 231

<212> DNA

<213> *Drosophila melanogaster*

<400> 613

405/586

ctgctgccga ttctgagttc tcgatttctca gttcgattct cagacgttgg cgaaccgaga 60
accggtgacg tagtacgttg ccgtccgcca ttattacaac gtcggctgcc acacgcaaaa 120
ttggacatac cagctaacca aaaataacca acgccaaactg cagctcggat gcgaagtgtg 180
cttgccaaaa gtcaaacgat aacgaaaata acgcaggacc ataaaattcc c 231

<210> 614

<211> 473

<212> DNA

<213> *Drosophila melanogaster*

<400> 614

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cgctctactt tctccgctcc tctctccact caataatgtg ccaactgttg agtttccttc 180
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acggggcgag cgggagtatg tgggcgttgg gcggcaaagg gttgagggaa gttgagaacg 300
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cctctcgctc tctcgccggc atcgaaggct gcttacaggt ttttatagta cttcggcttt 420
gccgaccaca gccaaatttg ccggcgaatg gttggcttct gcgttggttc cgg 473

<210> 615

<211> 188

<212> DNA

<213> *Drosophila melanogaster*

<400> 615

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tgataaaga gagatccgca tactcttgtt gtagttgttg ttgttggtgc tttgccggct 120
ggcttgcaat taacgctgac gtcgacttcc acacaccctt taacccttgt gtgccggcga 180
atgcagtt 188

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<210> 616

<211> 439

<212> DNA

<213> *Drosophila melanogaster*

<400> 616

tgcgatagta tccgactctc tcccgaaaag cgtgctctta gtgaaacttt cacgctcttt 60
gggggtttcga gaagtgaatg taagttgatt gtcgtaagcc ggctttgacg tcgttttgag 120
accggagatc ggagaccagg ggcccgagat ttgagatttg agacccgag cgcgatagga 180
aaggaaaaca agtttcttcc gacgctatgg gctgcgtcga cgtcagcgtt gcggcaacat 240
ttgttaacct gttttttatt atagattttg tgttgttgct gcgagtattt gatttggccc 300
gaatgcacga tggaatagga cgggggggtg taccocgctc tgcaaccaga cccgactttg 360
gctgctgccg cttggtaaca ttcgctccgt tgatcttgct aacttgacca agttatttga 420
actatgcaca tgttgcaga 439

<210> 617

<211> 144

<212> DNA

<213> *Drosophila melanogaster*

<400> 617

tgtggtaaga gtagtgagc gtcgaacaga aagacaattt aagagagcgc agatcgact 60
tatgagtaca gtcgtgggca agaaaaagt aaacaacatc cgaacagtcg gaatctcaga 120
tagtgctcag acacctaagt atac 144

<210> 618

<211> 410

<212> DNA

<213> *Drosophila melanogaster*

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<400> 618

gtctgggact ggttggttat gctggtgta ttttcattgc aaacaaatga tgaggaacac 60
gcaaacgcac tcagacggtc cttcgtctgc tgggccacag gaaaagagge cccgggggtct 120
caaattgaaa tcacaatgag ttgaggactt ctgaagtccg actggcagge acataaattt 180
catcgcagag cgaaattcga gcaaaattat tggatgattt ttatggtcac ttaaagtggg 240
tttttatgtg gcccaggagg cagtgcagcag tgcacataaa aataaatgga aaagcgcaag 300
aacattctgc ctgctcgtga ttaaaaatat attttgaaat tctgctaaaa tcgattgcat 360
ctcaattttt gccgttcgct ctcttcattt taatttcattg ttaagaattc 410

<210> 619

<211> 531

<212> DNA

<213> *Drosophila melanogaster*

<400> 619

ggcggacgga ggcggtgacg cgactgagat gcgccgataa tcgcgctacg cgtgcgtagg 60
cccggcagag gcggtaacgg tggcagaagc ggcggcagag gcagcgacag agcgccagcg 120
actggctgga atatttcatt ttcacgacta gcagtaaaac ctaccctacc tgtgaacagc 180
tattccaaac attaattcct attttcaact gttatttaag tgaaatatat ggcatatgca 240
agcgcatttt gatgttttta agtgtaaatt ttattgcgaa taattttttg ttgctttttt 300
tcatctaaca atcaatgtgg aggcaatctg tatagttcga taacttactt taataaaagg 360
tatacacgga atttgaagca attttataaa ttaaagcaaa atcacatttt tatgtttaga 420
taatgaaaag gtattttact gatctgagtg aaacattatt aatattattc aatatcaact 480
aagttttcac tgtattacca tttgtcacia aatttcatta cactttgcta a 531

<210> 620

<211> 583

<212> DNA

<213> *Drosophila melanogaster*

<400> 620

cgttggacgc actcgctgcg ccaccgggcg gtacgcacct ggctttagat catcaccgga 60
actgggttgt ctagtttcca ttattcattg cgaattgcag ctccgattat gacaaaattg 120
cagttgcttt cttctaaaat tcttttcgca gcttcttctt cccgtgtgac actcgattgc 180
cattcccacc gaatgaaatg cctttgcgta tcgatagttg gtggcggggc tcacaagatg 240
ggtatcgagt cttagccgaa ggagccaatt ttcgtatttg aatttgagat gatgcactga 300
aatgcttcgc aggattctac aatctaagat atttacttca aattgagaat ttttaattctc 360
agtcaaacat attcgtagcc attgggttgg aatttaagct tattatgaaa tttatattta 420
gctatgttga ttaaataaac tgtttgcaat tattcgcttt taattttcga atgttattta 480
atagctacta caccaattct tgataactag acttatgaat taatgaataa caagttgaaa 540
tctttttata tttttaaatt gtccatggtg ttgaatattt tga 583

<210> 621

<211> 462

<212> DNA

<213> *Drosophila melanogaster*

<400> 621

gtgtgcactt ttaagattct acacagtttt cacataatta tgtaacggt gactacacag 60
tacaagaaaa acaccacac gtacatttat gttacaatcg tacacgaata cgcttagaaa 120
atgcacaaat gaagtttcat gctctcactc tcacatacta tttttttctt agcgatttgg 180
agacctgtct tttggcttta tttatgccta tttgttgttt ttctgcagcc cagctgctga 240
ttacatttcc gatttctagt cattcttggtg gacaattatc aaaatagaac cttgcaagcc 300
tttgtaaaca aacaaaattg tggttctacg ctttttaatg attcatttcc gatttaacag 360
cctggcaatg acaagattta acagcagtac ggtaccgaag ggataaagcg acgtcagatg 420
ttgggaaact aactgaaatg gaatttctta ttgcttacat tt 462

<210> 622

<211> 145

<212> DNA

<213> *Drosophila melanogaster*

<400> 622

gttcgaattg acagtgggtg ttggtgaact agatcgcgga ctgaagttc gggaactttt 60
tagtgtgtaa gcttgccagt aatgaattga agtatttaaat aactttattt tgaatgaagg 120
gtttgaacat aaaaaatatc ttcgg 145

<210> 623

<211> 518

<212> DNA

<213> *Drosophila melanogaster*

<400> 623

ggctggcgat tgttgctgct gctaactggg atactggaat aaatcataat gcatttacgc 60
accgttgctc ctcaattttc gagtctgtgt gcatgtgtgc atgtgggtgt tgtgtgtgcg 120
tggtgtgtgt aacctttggc aaaggaaaaa tcaatagcaa cagacgtaga catttgtttg 180
ccgctgttta tgtgcagccc tcgcattgtc ctteggcccc aaaacaaaga gccacccttg 240
cagagatggc caaatcccaa aaaagaaaca agtgaatggt ggtctgcata cagactataa 300
ataaaagcaa aagttatcgc aaaaggcaag cagcaaaagg caaaccagat gaacggccaa 360
taactcgtca gcatgctggg tctgggtcgt tgctcttttt ttttccgatt ctgattccgt 420
ttcttctgc tgctctggct ccccgagaga aaaagctgct ccagaaattt gtctcaccca 480
tctgctaccg gcattccaat ccgccatttc cattgccc 518

<210> 624

<211> 249

<212> DNA

<213> *Drosophila melanogaster*

<400> 624

gtctgtcgtc tgctgtaatt tttttttttt tattgctttt gttcctttgc cttacgtttt 60
agtttcattt ttggcttggc caaaccttga accgtacacg ctcagtttat tggecgcttt 120

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tttactacga ataccgttca ttcgcttcgc ttggcttcga ctgactttcc gatgatgacg 180
ccggcgaacg ttgattatga agatcatcat cgccgttctg tgggttattc gagggtaggt 240
atatatttt 249

<210> 625

<211> 534

<212> DNA

<213> *Drosophila melanogaster*

<400> 625

gtgggcactg ggtactgagt gctcggctct gggttctctg ggccactctg ctctggcaca 60
ctgagcaccg agctggcagt tgggtagaaa tcagagtgcg ccagcagcgc gaccgagatg 120
accactttt cggtattcgc actgagaccc aactgctact acccacagaa agtggacaac 180
taggcggagt ttttttctat atagtagcag tgaaacgata gcgtttttcg gatattattat 240
gtacagccta cgtagcctag tgtaaaactat atgcatttat gttgaatttc ccagcgcaaa 300
cgtggaagag gaaaacaggc gacctgaaaa agcagcagca gcagcaagca agaagcagaa 360
gcacaagcag caaaaaaggt tcgcaaccog ttcaaaagcc cccgaaatac caaatattac 420
caaaagttac cccaaaagaa aaggataaat cctgttgctt cccaaaaacg aaaaccgcag 480
ttttaagcca aaagtgtcca aatccctggg taaatactta ttttgcccag ctga 534

<210> 626

<211> 557

<212> DNA

<213> *Drosophila melanogaster*

<400> 626

ggctcaataa atataccatt tactcgttga gtgaatcggg attcccgtta ctctgtagcgt 60
aagcgggtat actaaccgac agacttttga atgactaacc gaaacaaaga ggttttcgaa 120
cgtatctgca tcctagtata atcggtgacg agtgagtctt cttgccgaaa atatctcatt 180
tgtagcgctt gcattccata ttgccggtgt gaaacctatc acccaattct gctctggttt 240
cgttgcattt ggtgagggca tgaataaaat aatttgtttt taagtgcgc ttagaagcat 300

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tcctcgctaa attgcgcaat tgtctgagcg tcccaaatta gaaaatgcat gataagctgc 360
cttcagacat agtaatttaa tagcacacat gccacatgt tgagatctca aggcgtagat 420
taaattttcc gaccggacag ccgcagcctg gttctgcgtg agttcaacaa tctctaaatg 480
gtcgttgcaa tgtaatgtgc tgcaggcact gcgaatcggc cctttccctg gcgcaagcac 540
atTTTTTTga atgactt 557

<210> 627

<211> 397

<212> DNA

<213> *Drosophila melanogaster*

<400> 627

ggttggagca tcaaaattga ttttaatgat gccttcgttt cggatcgctt atcggacatg 60
taccgaacat cattccaaaa tcataaatct tgctatcatt tcgttttgtt gccaccacct 120
ggaagggagt gagctggggg ggttttggcc aacaattttt catttctccg gccaagacat 180
gtgcatgtat gtatgtccgg agtatttggg ttccgggtgag caatgagtga cgaaagatgc 240
cctgtcgagg tcaccagctg tgcgtgtact ttccacggcc acagttttgg agtgtcgaag 300
cactgttttc atattaggtg gggccttcct catgtggcag gtgcagcagg tgctcgctg 360
cctttcacta aacaaaagcc gaagagccaa ctgagtt 397

<210> 628

<211> 408

<212> DNA

<213> *Drosophila melanogaster*

<400> 628

gcgtggccga tgtattttac gatgtttttt tcgtaacgat taaatatgga acttctgggt 60
aattacagct aatcttcaat caatatattt cattgtgtaa ttaccaatg gaataaaacg 120
atgtcgctt ctcacctcca tcctcgcttct ttggcggatg cttcgactat gagctactaa 180
tttctcgga tgaggcaacc gcaaatggaa gagcgtcctg ttgcacatgc attaaccatg 240

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gcacacgac attatgctaa cttacacaca cactcagtgc tgcaccgcat acgagaatgt 300
ccatacatat gtacatacat actatgcaca tatacaggca cagggagctc atcaagtctt 360
ccggtttgtc gaggatgttc acattgttta tgctccggaa taaatgaa 408

<210> 629

<211> 566

<212> DNA

<213> *Drosophila melanogaster*

<400> 629

gtctgttgcg tcatcgatgt ctgtcccttg agctctcttt gtttagcact tctctctctc 60
tggtcttttaa ttttttttaa tttttgccgg caaacctgca actgtcacia cagggcgacgc 120
caagaaaaat gatggggcag cgggggctgc ggtgggtgat ttgcaaaact attgggttgg 180
gggatagtgg gtggtgttgg ggggtgctagt ttgccagtgg gcgtcattta tegtatgatg 240
cgcatttccg gcgcactca acagactaca gccatataaa caccaagcaa acatcaataa 300
tcacaacaga tacgggtcgat tttctgttac ttaaaactaaa ttacatatat acaattttgt 360
aaaattactt aaacattggt tattacacia taaaatagaa aaataatggt tataaaacct 420
tactcaaata acttacaaat ttataaccaa atttccataa caaaatacac aatagattaa 480
actgtaaaaa tataatttga ataattctca aacatttcat tacaagaatt ttaatttta 540
taatccttaa acagggttttg aaacta 566

<210> 630

<211> 570

<212> DNA

<213> *Drosophila melanogaster*

<400> 630

tgctggactt ccccgctga ggggtggcaac cctgtcagtg gtgcacctca gcgcttttaa 60
agcgacgtta cgcctgcggg gtattttgtg gtccctgatt tctatgctcc ttgatcagcc 120
agccgaaggg tatgatgttc cagaagagca cttagtttca tatctttgta caatatataa 180
tatgattata gtaaagtggg acaaattaaa aaaatatatt tgtggagaat gtggaaatgc 240

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cgaaatcaaa atatattcca ttataaaaaa atacaataaa tatcacagct gtatttgacc 300
aaaagagcaa aactaaaagc ttatttttcc agttttcgcc atttttattg accttgattt 360
cgactaataa ctttagcatg caaaaataat aaataattac aataataatt aacaataatt 420
acaatttttag ttattaaaat tgtgcaattt aagtttatta gttaaaaacc tctctcgaat 480
gatgttcttt tgctttctaa atactgttga taagctataa ataatgttga atagctatta 540
ataatgtcgt ggctatatta aattatataa 570

<210> 631

<211> 579

<212> DNA

<213> *Drosophila melanogaster*

<400> 631

actccaactc acccgtttcg cagttctgtc ggagattgga tcgaatcaga taatatagtg 60
ttagagatgg tctaagaagg tctaagagag agcgaaagag agcgctgggc ggcaactcaag 120
aatcgctga tcgagatttt gttggttaatt tatgggccga acctggtgga atttgcaagt 180
cagatttata aagcaaacat gcctgaagtt gattaaaggt tttgaatcta catttctatc 240
ttcgaatgcc atttaaagca gatgactctg ttcacttatt gtctggcttt ctaatgtggt 300
ttacaaacag cggatatata aaatttaaga gagcttcct tacacatttc tcttgagctc 360
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aagccagacg ccagttcac agaaatgttg ttttatatat ccgaaaaat agaatcacgt 480
tcacctattc ctgataacat cgccagatcg ttcaccaggg cgttttgaat aatgaacgct 540
tgcgacacct gagattacc tactattact aggctaatt 579

<210> 632

<211> 511

<212> DNA

<213> *Drosophila melanogaster*

<400> 632

414/586

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tatggacaaa tggatgtgca tatctcggag atacaatctc gccgctggaa atacccaaac 120
ggacaaggga cttgtccggt atttcattga gacagcccag aaagtgcccc taagtccttc 180
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aaattttcca ccccgaggaga agcacgttca gatagggatc ttccgaattt tgggtttttg 480
gctcggttta cgcattttac tggaattcgt c 511

<210> 633

<211> 505

<212> DNA

<213> *Drosophila melanogaster*

<400> 633

accgggtcca cgagaagggtg tgtccgctcg ttcggctcgt tgggctgcag atggaacgca 60
ttgtgtattc gtctgttgac ggggaaaggg gaatgtgcgg attacctgcg cacctggatc 120
ttcggtgcat tgccagcagt tgcagatcga ggctaggtag ctccaaacag agtgcacata 180
ctccattcta aatgcaattg ttcaattggt ctttattttt tatgcaagtt tttctaggga 240
tggaattgta catattcgat aagatcagtg ctaccagact gcttaaaaca gctgtataca 300
tacttgttat cgattaggcg ctaaataatta caattttaat cggacattaa attcatgggt 360
tttcataagg gaatactagt ttattactta ctgttctagc gttatccttg gtttatttat 420
tatgaaatac tttttattgg gaattaagtt gatttaaatt atactttatt aaatttgtat 480
attcttattg gaaatcggca taatt 505

<210> 634

<211> 262

<212> DNA

<213> *Drosophila melanogaster*

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<400> 634

ccatgggtag tttgaagtac tacgcggtaa aagccgaaaa tcggaaaatc cagagggcaa 60
gaacatacaa aactgcaagg caacgaacgc actaacacag cgacatccag acagacacgc 120
actcgcatgc acacacatcc acacccgaga ggtttgcagt tttggtatct cggatttcag 180
cagttgttac catcgttttg tagtaactac catgaccact gggaaagctt tcccccttcc 240
cccctgggcc ggggaaggag gt 262

<210> 635

<211> 210

<212> DNA

<213> *Drosophila melanogaster*

<400> 635

tgccgagggg aagccgaaga gccaggggtat gcgtgctcac tttccagagt tgtattaggg 60
ttgcagtagc tgccctgtga aagaggataa aatttgaatt ttaatgcaaa cagagaacgg 120
ataaataatg aaatcgcttt atttactttt ggcacccttt tgaagcgtcc ccttttatat 180
tttgaccag ttttgcacat aaacagttat 210

<210> 636

<211> 317

<212> DNA

<213> *Drosophila melanogaster*

<400> 636

gtcggaacc aaaagatgct gccgcaagtg tgaccagatt cggaaatgta aaaaaacaga 60
accgtattac cgccaataat tataacgac ttgttttagaa agaaaaataa aataattaat 120
taattaaata cgataattta tggaggtggt cgattttcaa gtcattcaac atttcttata 180
tgatcaacat gaactacagc ccgttcatta aatatggta aaatataaac tccacattcc 240
ttttacaaca attactttgc atattttattg ataatttacc tactgaaaca caacactatc 300
taatcgctct tcaagcc 317

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<210> 637

<211> 170

<212> DNA

<213> *Drosophila melanogaster*

<400> 637

ggtataacct aagggaaatc cgactctgct tcagaactaa taacagatca agtcctaaca 60
taaaaacgat caaaaccgat tgattatctt tgcacactcc attataacat ggctcttttt 120
agacataaat atcggtgact tcagaattag ctctgtattg gactttcata 170

<210> 638

<211> 433

<212> DNA

<213> *Drosophila melanogaster*

<400> 638

cgatgaactc aaagtagccc actagtatgg tgctcgtgtg cgtgtgtgtg ctgttgtgtg 60
tgaggagagag agggacgaca caaagagcgt atcaacattc aattgcattt ttaacttggt 120
ttcgctctgg aatttttgat tttctcgcgt ttttcgattg ctttttgta gcaacaatta 180
atttacaggg ttcgtatttt tctctttctc tctggggggg cggtttccac aagggaaaac 240
tcgacgttct cattgttttt ctccaatgcg ggtgctgtta tcgtcctctc tctcgctcgt 300
taattaagga tttttgtggt tgaattcacg ccactaaaa cacgacccat ttaaatacac 360
taactttccc ctttgaaatc gtatattatt attattaccc gagccttagc atacaaatta 420
ttaatgtatt gca 433

<210> 639

<211> 606

<212> DNA

<213> *Drosophila melanogaster*

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<400> 639

gatcggataa tgaatgggag agagatatag acggaagcag cgctgcgaca gcgcagtgac 60
agcgctgcag cagcagaaga gagctccacc gcgcgcttct ctctctctct ctctctgcct 120
ctcttttttgt agaattggaa ttgcagaatt gaagagtctt ctcttaactg gcatatgtac 180
taacttagaa aacgattcac aacatatgaa taattgaaaa caaaagtacg aaagttatct 240
ttaaggaaga tgaaatacaa agataaacgt gaaatttaag ttgcttagat tcactcaccc 300
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acctgggtccc aggcactca gttcatggca gcggccatgg cggctgctgg gccgagggga 540
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gtgggc 606

<210> 640

<211> 375

<212> DNA

<213> *Drosophila melanogaster*

<400> 640

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gattcttttt cttgctttat tttctgcact ggtgggtggtg catcgagagt gccggcagag 180
aggcaaagaa tctaagagat tgagaaatgc aatggggatt gagatgagag actgttgctc 240
caaggaacaa caaatcggga atacgaaata cggaatttat tgccatgtct cctgctttga 300
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ccaggggggt gatgg 375

<210> 641

<211> 435

<212> DNA

<213> *Drosophila melanogaster*

<400> 641

ctctcgactt tctctcaccg ctctcttttg cggctctctt ttgcgcagca gcaccagcag 60
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agcaacgaat tttagctgcc cagaaaaaga ccacaaattt cagtgaaaac ccagcgataa 180
gaatcccaaa aagtactaat ccagctgaaa aacaaccatc ttaaccggcc atgtccaaaa 240
aaagtgttag ccaagtgttt tgaataacgt agttggtgta aatgcttaaa aaaaataagc 300
tagtccgggg cccagagaaa atcgatacga tcccccaaa aaaagggggg ctgctgcgtg 360
ggctgcccga gtgaaaattt ccagcttaaa aatagtacta gatttgagct tgaaagaaaa 420
cccttgaatt tcctt 435

<210> 642

<211> 790

<212> DNA

<213> *Drosophila melanogaster*

<400> 642

ggttgcagtt tttcccaacc acgctacgct ctctcactct ccatgccaga cattctcttc 60
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cacacacgca cacacaccag gccgtgcgac acacatagac atgggcagga gcagataaac 180
gccatgtttt tcaaategct gccaggcgca ttcctttcca ttttgttcca ctttgcgtgc 240
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gacttcaccg actttgactc gctactccgg ctccgaatct gaatccggcg atatgctcgt 420
ctctctatg ccgtacgttg tttccctgt tttgcctgtt ttcctatcg ttgtcgtcat 480
cccgttcag ggaaagtga gtgaaaagt aaatgccacg aatgccggtt gccagttgcc 540
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ggccgatttt tccggtgtc tttgaacct tttaatgatt gctctttaat ttccattaag 660
tcaatgccat tctgcagact gccatTTTT agcataccca ttacaattta ttaattttt 720
tttaaattac ataatatata tttatataaa cattttgagc aaaaaattc agtttaagaa 780

atgcgaattc

790

<210> 643

<211> 565

<212> DNA

<213> *Drosophila melanogaster*

<400> 643

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agattccac attttggcga agccaagaaa agcggcgagt actcgcgatt ttcccacgcc 120
aatccaatta acattgatta gttgattttg cgctcgtgtt cctggaggaa atttgcattt 180
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tgctgaaac tttttggccc taatggaatt tacacgagtt cttaacactt tccccaaag 420
tttcgaatgg ttttttggg ctcaggacgc cattttgtgg ccgagcgact aaaaattaaa 480
acaataaatt aaggacatcg agcaggaggg ccaaaaatgt gttgcatact ttgggggaat 540
aaaaggggga tttcattatg aatgc 565

<210> 644

<211> 511

<212> DNA

<213> *Drosophila melanogaster*

<400> 644

gtttggtgac agaaaacaac atggctgaca cgaaaagtgt gacctatagt cgtgcagcag 60
aaaaaatca ctccgaagac cacgggcacc ctgtaagcaa aatatgaagg ggcttctgaa 120
atgcgattta gttaattgtt aaaaacaatt ctaattcgtt agtcactata tgacgtttat 180
ttaaacaat aaagtaacca aacatttatt aaccttttaa attttaatat aatctatggt 240
atatgttgat attgcaagat tgtgctggag tattgaacaa tttctgcac aacaagtctt 300

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aaatgtgcaa gtgctacaaa aaattttttc ctgttaattt aattgttact gctaatttaa 360
gttagttacc atattagttg ggaattgctt atgttatttt atccgaagtc aagtggagcg 420
caaatgataa tcttatcagt tgcgcatctg cgcctatgcg tatgatgcc agtgtgacac 480
ttggtggtat ttaattagca aacggaagaa a 511

<210> 645

<211> 558

<212> DNA

<213> *Drosophila melanogaster*

<400> 645

ctccggccca aagcggaaat gaatggatcg gatcgaatag accgatgacg ataggttcgc 60
ggcagagcga acaagtgcag aatcggcaag gagcgtgttg tctatgtgct taatgcaata 120
ctttttctgg acactgtggg aaaaagacat acccttacca tatttttatt attgattgga 180
atattcttca taaaacatct ttatactgtt tatgaccagt cttatttgaa aatagcgctt 240
aagcgtagag tatctgctct cgtatagtta taaaagtgat caatatattt gtctagctac 300
ttattaattc ccacctgaaa cctactcgaa attacaaaaa gaaataacat taggaggctt 360
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atctaaactg ctgccgaagt atgtatggat gttacataaa ggacaccaaa ttacacctgc 480
ctaagtttta ataaaaaggg tagttcaagt atcttaccaa tggcatactt tcgcgttctt 540
tcatgaagat gaattggg 558

<210> 646

<211> 572

<212> DNA

<213> *Drosophila melanogaster*

<400> 646

catcatgtgc cagacaactg ctctggtgca ctgtgtgtgt gcgagtggcg tcggccagtg 60
ttgcaagcgc cgtccagatg gacttaaaat tctaattggc gtggcagcga ctcgagcaaa 120
acgcgcgttt tcatacttgt attagcacac ttgcacttta ttctagcttc aatattgctg 180

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cgttaagttg atcctatatc ctacacctac atttgaaaag tattcttaca ctttaaatctg 240
aaggaatggg agatttcga cctgtataga aattttggat aatattcttg aacgcgcctc 300
aaaagtcaat ataacgtttt attatttgta aacttggtca agctgtatta tggaactttc 360
catcgattat tctgtgatgc agatgcgata gaagactatc aattctgaca ccacgtcttc 420
gaggtgctaa gagatagatt gagaatcagt ttgaatatag tataacatat ctgtagggta 480
ctatatatcc tcttaataac taaacacaca aggcaggagt ggactctttg attattgtac 540
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<210> 647

<211> 507

<212> DNA

<213> *Drosophila melanogaster*

<400> 647

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gcaaaagtat taagcacaca cacactgccg gtgcgcacgg acacacacag cacactcccg 120
caccaacaca ctagagcaag tgcgtgtaca tagagggttt gtgtggggca catatgtgcc 180
cgcacgatgt cgatactggc tcacattggt agtatTTaaa aagcgacgaa cggcccgcgc 240
tcgaaagcac gactgaaaac ctaaattgat taagcgaatt tgttctatca agctaattca 300
attgctcggc cagttgactg aatgatccac tgcaagcgca gcctttatgt aatcggaatc 360
agtgaaaaaa gcgaaacacg gcggccgccg aaggaatacg actccaggac ccgagtcaaa 420
tcgaatttgt ttgtggcgcc tatttacggt aaagtaaaaa tcttggtgct tggggcaccc 480
gcttctcgaa cccttccac tcaaagg 507

<210> 648

<211> 26

<212> DNA

<213> *Drosophila melanogaster*

<400> 648

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gccatgacga ttcgaaatgtc gaattc

26

<210> 649

<211> 412

<212> DNA

<213> *Drosophila melanogaster*

<400> 649

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cgatcgctga aagataggcg tcacacattc ctatcgatta tacttagcaa agactcgcac 120
cgtaatgcac agtgaggcga aatgttttct tttacttata gtatagttat acaattaata 180
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tcaggcacgt catccaatac aaattttctaa ctacagggtt ttaaaccctc tatataaatt 300
ttttgaaaag gttccttagc cacgactgag gtactacact ggccagggga ctttcgttac 360
agaattgttt ttataatagt tattccggag ttaacagata ctgccatgta at 412

<210> 650

<211> 492

<212> DNA

<213> *Drosophila melanogaster*

<400> 650

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caacagaagc gatcgaaggg gctaagcagc agaatctgag aacgttttta ggcgcgcgta 120
taaacaaaaa gcagatcaca ggagggaata tgtataaata gcgcccccaa gtcccaagcg 180
tgacgtata tatccctccc tttcccttcc ccattccctt cgggccatcc ctctcctttg 240
gtattttatt tttaaatatt tgcagtcggt gatgttggtg tttttgtttt tgtttggttg 300
aagtcatgct gttgacaata tcaaggccag cccacctacc aaacctaagt tcctttgcac 360
agtaagaaaa agggattttt tataattatc cataaaacga aaggtcacga aaaaaatatt 420
gaaaagagct atcctttaca tcctataatg ctaaagctaa aggtgaattt agggttttta 480
gngcgacttt aa 492

<210> 651

<211> 582

<212> DNA

<213> *Drosophila melanogaster*

<400> 651

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gtttcgtcgt ttgtcgtaat cactgcgttt gcttttcggt cttccgtttt cgtctttttc 60
gaccaacaaa aggcgaaaac aacaacagca aatacaaaact gtttgccttt gttctttttt 120
ttattttttg cacaaccgca tttcgggttt gcagcaaaat taagaaaaaa tctctagttc 180
actttttaaga aagaaaattc cgtttaattt tagcatttta tgtttagcaa ttttaatatata 240
agtcaatctg aacagcgctt gaaaaattcc caaattagtc aaatcattgc taaaagcgat 300
attatcaagt cacgattata gttatgtagg ttcacatcaacc tggacaaaaa tttgccaatt 360
taattggcta aaatctatca agatgggtgg tttaaagata catttttagtt acttatcaat 420
attttttagaa gtaaataccg gggttaaatg tttcgtggaa aactagaaat ttaccccaca 480
tcattggcta taatttattt atagcgggtg tatatttttaa atagagcttt atttaatgct 540
ttttggttct ttgataagcg tttaggataa tgagtaaata ga 582
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<210> 652

<211> 528

<212> DNA

<213> *Drosophila melanogaster*

<400> 652

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gatecgacca tgagaaattc tgcaattcca tttagttttt aacgtatgct tactttacct 60
ctctgccttt gctataaaga attcgcaact gggatcaggt tttatgggta tcgtcttgat 120
agatgcgacg ttaagtttgc caagttagac tcgtatatca gcaactagtt ggtaaact 180
catcaciaag ttgatttgaa aatattttaaa gctgtaagtt tgttcattgc gcatacgccg 240
tgtaacatg tggtaggtag acccacatta cgcattcgca ccgtttgctc atagagctgg 300
ggctttgata gataagaatc gggcccgaac caatgtcatt agtccagtta acgtggcctg 360
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actaaacaag ctaatttccc agttaccaa tgtcggcaat ttctggtcag ttattttgaa 420
tggagtccaa tcatccgagc attaaacaat gtggcctctg caaagtttaa ctttattttc 480
atgattagga gctctcagtg cccagtgtga gttatttaaa taaccata 528

<210> 653

<211> 446

<212> DNA

<213> *Drosophila melanogaster*

<400> 653

agcgggacctg tattttttaga gttaccagag tatgttagga aaataacgaa attaacgact 60
accgatatct tatgcgactg atgtgtgctt tcgattatct ttattaaagc ttttgctcgc 120
catatttgaa tttaaaaaat agaggggaaag cttgcaatta aaatgtttga ctgaagcagt 180
ctgttccatt tttcaataat gccttattta ttcgacgttt tttttccaat acacttgaaa 240
gatatcggac agttttgcat tttggtattt taaacaagat tacaacagag cgaacttttt 300
atgagcggag ttactagaat ttaaactctg caagcatcgt ttttccggaa taaaaataaa 360
tgttttctaa gaaagttatt cggcataaca taattgggta agcccaattg attcttttct 420
attggtcttg gtaatagtgt aaaaag 446

<210> 654

<211> 403

<212> DNA

<213> *Drosophila melanogaster*

<400> 654

gtcgggctga tgacgcacg ttcacctaat tgaaattcga cacttctaata ttgaatttga 60
atcaaccgga agttgcagcg cagttaatgc tggtgttcgc ctttaaccagg cgccgcagtt 120
ggcggctctga cgatttgtgt gccaacagca aagatcttac atagtttcaa aatgtttatt 180
tgttttagttt ctaatctgta tttaataatt aaaaaaggt ttaaagaatt tgtgctttat 240
tttattagta gaaagggttt tggtttctgt aaattttaaa tttttcatat ttctgtacga 300
tcgccgagct ccactcgcac atatattatg tgcccggtggc acccccttaa tacattctct 360

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gttcaataaa tattattacc tattgcccta ttttggttac aca

403

<210> 655

<211> 525

<212> DNA

<213> *Drosophila melanogaster*

<400> 655

ggccagcccc cgcgcccc ttttgcctatc tcgcttgctc gcatggacaa aatcaacaca 60
agttcacaca catacaggca cacggatgtg aactcacaat gacaaccact tcgtcaccag 120
caaataaaaa agtgctggcc ttaaataaat tgcgttttat gtaattccac tacattcgta 180
cgttacgaaa acaagcacta ttcattattac acggtatata ttattacttc atatcgagtc 240
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ttcgacctga caaagaagtg tgggccgcgg cgagactgtg agaaattacc aagtgggtgt 360
ctgttatctt aatcccaaata actctagaaa catttggtat actagaattt ggagatttaa 420
gcatattata aaatatattt atttatattt actaaaaatg cttcttaata ttcgaaaaca 480
ggtttttttaa tagccaaagt aaaggactgg gatttttttaa taaag 525

<210> 656

<211> 589

<212> DNA

<213> *Drosophila melanogaster*

<400> 656

cacaggcgaa tgtcggaatg ataacagtca gtgagagagg ggggaaacac gacctctcc 60
tctctcgttg aaggattgca aaaagcgaga gggagaggaa gacagataaa agatagaaaa 120
aatcaaccta cgagatagct cgacaaaaaa taaaagacaa accaacacga agcgaagaaa 180
aagcagcgag acgaaatgag agcgaaaatg aaaacacaca caaaaatggc aaaaacgaag 240
agcagccaag caagcagcgg aagaatgtgg aacatacatt tttgtcgtca agacggcgga 300
aaagagtggg cttgagaatt gagaattggg gaagaatggc cggtttgggg gaataccttt 360

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cggtttgat tgtgtgctt gcgcgaccgc cctccccgtc catacaagta cgatagtgtt 420
gtgttggtgc gttgttgctt gaagggtgcc agtttattta ttttggcgc ccatctcgct 480
ttggccatt gattttgcac tgcttgctg ccttctcact cgcccacttg ccacaccage 540
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<210> 657

<211> 528

<212> DNA

<213> *Drosophila melanogaster*

<400> 657

ctcctgtgac gctgcgtcat cataatcagc gtttgtcgat tcatcaaaga aaccgccgcc 60
ggttgctctc tccactctct ctctctcttt tctccattc aaggataccg aaagagagag 120
atcgagagag tgccccctct ccttcacact tccctcatgg gtttcctatg taaatcattt 180
aaagggaaat tggtgcacaa ctttaacgag ttgattggag ggggaggggt gaggctaact 240
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gcccttccac aaggtcttcc gccccaacag gctgttggga aaatgagatt aggggtggtgg 420
gggggttaaag tggggggacc cagcttttat gggcctggta attgatgccc aagctgccaa 480
ccatatgctg atggaatggg ggccgttggt cgctgcagaa agaaaggg 528

<210> 658

<211> 776

<212> DNA

<213> *Drosophila melanogaster*

<400> 658

ggtaggagat acgaatcgga tttgaagtgc tcctaacgat ttgaaattcg tatttggatt 60
ggaatgcttt taatgcgtgt gcgacgcttc tcgctgcgtc tgaatactta caattttatt 120
tatttattta tggtgaactc gcggattggg tttgtttata tggacatctg gcggtggcct 180
cgccattaat atttatcagc tgctgcacct ttcccggtt tgcagctctg ttgccttctt 240

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ccatggcgtc gcataaatcg cagcaacttt ggcccgacac gcccctcgaa cgccccgatt 300
ttctctgaac tcgcttggct cacaagttcc aggtacaatc aagtttttcg cttttattat 360
ggggagtata atatatttta tacggcttct atctgccgcc gtcttctcgc tccctttcca 420
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gttgaaagag aaatgtatca tgaggttcat ggactttgat gtgccagtct gtcacctgag 660
tcccactgct cagtgatgaa aaagttcttt tgagtgtttt atgtatgttc cataaacacg 720
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<210> 659

<211> 756

<212> DNA

<213> *Drosophila melanogaster*

<400> 659

gtttcatcca aaattccgca ccccgcaactt gcccctcgat catcaatgct gctttaaaaa 60
caacatactc aattggattg gatgatgtgg atggagaaaa ataaggggcg gtcattgtac 120
catacaatgc tataatttta tatattcgcc caaagttggg actacgcaat acacagtatt 180
cgtctacgct taaattaagc gatgactaca tacatatagc atccaaaata taccagttta 240
gcagattcga aggtcatttt atgtgtcatc ctaccatcaa tagagagctt tataatgttc 300
taaataaatt taattgtttt cgagaggaaa aatgtctatta tattattgtg aatcctataa 360
acgagtagtt tgctaaaaca agtaaaacac agtttaaaat ataatttctt aacagtattt 420
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gcacacactc ataatccggc ccaaccacc accaccacca tcgtcatcgg aggcaccacc 600
aattccggac tatggagcat tagcttcttt gtggaacatc cgtgccacgg aagtgggcct 660
catgccgtgg ttttactct gcagaaaagg acagaaaata agtcgaaagg caacacatta 720
ccattgccat agaacggact tgaaatgcgt tgagga 756

428/586

<210> 660

<211> 630

<212> DNA

<213> *Drosophila melanogaster*

<400> 660

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cgccgaccag actctcggac aaccagtgat gatctagcgg atgcgttgct gtcctcacia 60
tcgggtcaacg agagcgtcgc actattatta ctttatgata actgcgcgtc tcgctctatg 120
gtgcgttaat atgcctcggg gaggcctctg acattctacc catcactcgg cgtaaaagac 180
ttctgtgttg ccaattgtgg tccgaaatag aattccagtt tcgaacatga caggcgggtg 240
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gatgagaagc gcgtagaaga accatcgaac tctcgagcgc atcaactcaa cgctcaatgg 480
catacgtgta ataaattcag agctctacaa attattggat aattaaaact gttctattgc 540
gtgctaaata gacataccat aaatcacaaa tttgtgcgat atgcatatcc caaatgtcaa 600
cttgcttcgt ggtgtgaagc cataaatata                                     630
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<210> 661

<211> 162

<212> DNA

<213> *Drosophila melanogaster*

<400> 661

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ctctgggtgtg tgtggggtaa catttatgtt tggtgttttt gatatgttct agctttggcc 60
aagttaaatt aaaaaaaaga acaacaagaa gtggagttgt acacaggaaa aaatgatatc 120
aagtgccttt tcttctaata tatgtttatc ttttgaaaaa gc                                     162
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<210> 662

<211> 509

<212> DNA

<213> *Drosophila melanogaster*

<400> 662

accacttac ctgctgctct ggtccgcgga tcaaatgttc gtggcaactc gtaaagattg 60
gttcactgtg tgtagctagt ggtacacaat gaaaatgcaa tcgaagtagg caataaattc 120
gatgagtaca tatacatggt tcttgcagct ttagcatact actttattac tttgtgttaa 180
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ccggtgtatt tgggctgcta ccgattctgt gtgtttttat tgctgatttt gtcgtttcat 300
cgtgtatttt cggttatagt gctctgcacg ctggagatcg agtagtcac aggctgtcgc 360
taaactgggt tcggactgca ttctttgggc cacgttattg gcgctgcgct agctgctgct 420
gctgctgctt ctgctagttt gagcaggctc agcgcaagtc gcctggctga aagcgaaatg 480
atcatatgcg gtgcaatttc tatgaattc 509

<210> 663

<211> 182

<212> DNA

<213> *Drosophila melanogaster*

<400> 663

ctctgcctga ttagcagtag cagcgtctag ttttctcgtg tattattggt tctgctctcc 60
gcgcgctccc gttgcctctc ctcacagcag ccgccttcga acgccgacgc tgctgcttt 120
atcttcgcgc cgctgctgat aaaataaaga acaatattaa tttaagtta aaatacgaat 180
tc 182

<210> 664

<211> 528

<212> DNA

<213> *Drosophila melanogaster*

<400> 664

430/586

ggacaagcaa agcgacaaga gcgagagaag aaccagttgt cgtggcacgt cgaccacatt 60
ccacgcgaaa gaggtagatc tcttatttca ttcacatttc aacgttcgaa ccgtgtgttt 120
gtgtgtgtct cctgcagtga cgccggtgaa gacgtcgaat gagcagaggt ggtggcaccg 180
actgcatgtg gaggccgagt ttggagatct ctggatgctt ggcgcttggc atgcgacacc 240
cgaaaagacg aaataagaag ggaataaggg cacaaaactt aaatacggtc aaatacccac 300
atatgcatat gttttatata gagttatata gcatataacc atatatagtg gatccatttc 360
atgaatgcat aaccaatctt catatacaaa tattacctat cagtaacctt aaactgtcat 420
agtttaagat ggtttacata actgatacat aaaacaaact ttgcatggaa accagagaag 480
aacagaggtg gcgccaatg cagggcccga gagagagcag agccgcag 528

<210> 665

<211> 633

<212> DNA

<213> *Drosophila melanogaster*

<400> 665

atacagacga tcgcgcacgc cggttggaat tcgaaagctt catctgtact gagaagataa 60
aagaagtttg agaagttctt agttaaatat tttatgattt tctgaaaggc ttttcctttg 120
taattacttt cagagcccta taaactataa ataccactca atgtggtacc cccacacca 180
ggaactagca actttcatag atcgaaaatg cccgcaaacc cgactgtcaa aacaggcaaa 240
caaattgtgc aaataagtcg gggaaatgtt atttatgccc gtaagatttt ccgtgattaa 300
ataactaagg tccaggccag tcgcctcgcc gcttgtttgc agaatgacag cagttgcaac 360
ttagccgagc tccaaatgtg tcagcatcgg ttgcatatta atggcccga ggtgtgcatg 420
ccaattgtca tgcgctgaaa tgcttgtaac aacgtcgatt gcttttggcc aagtcagtcg 480
tctatatata cccagcacca gccccacccc cagccagaaa gcaaataaac ttcacatcac 540
tttcaaatcg agcaaagcca aagtcaaate caactgaacc tctgctcttc cactttttct 600
cttttaatca aaaagaagtc gatgcttctg act 633

<210> 666

<211> 460

<212> DNA

431/586

<213> *Drosophila melanogaster*

<400> 666

gtacactctt tcattgccgg ccaaaaaaat ccatcatagc cgaataatta tataactaaa 60
tataactacaa acgaattatt cgtgaatatt aaacctatct acgcagaacc aaaactacag 120
taacaaaata tcatttggtt ttagagaaat gtttaaattt ttcctatctt catacagaaa 180
taaagtataa ttgttagaat taaatcttat tttctgtatt taaatcttat gctgaagtat 240
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attgaactaa aaatgtaaaa ctatttcttt ttaaacttta acattaaatg gtcttacaac 360
aaaaaaatat gtggaacata accgtgaatt ggtttaatat aaaatttata ttttaataag 420
gtggaataag gcaagatgtc aagcccttta agtgccaggg 460

<210> 667

<211> 443

<212> DNA

<213> *Drosophila melanogaster*

<400> 667

actgcgagcg tcaaactggc gagccagggc gcaggcggtg gttcatttgg cactttgtct 60
ggtactctcc cacatcgcca tcctgcaatc tctttggctc agcatccttg taagctgttg 120
tcggagcaat ctgggcatgg ggcaactgaa aggaaagcaa ctttccatt caggagcgcg 180
caagccgcag gaatcgcgag cgcagacaat tcagttcggc tttaacgtaa tggacggaag 240
gtttgaatat cgcttctcgc ccagttgta cagataaagt ccactgcac gcaatagggc 300
acttggaag atacaataga acgccgacca gtggtgtgta tattaagggt tggatgctt 360
accaatgggg aattaagtgg caaaaatatt gcaactacga cctaaacgca agggcagtta 420
ataacttcgc cagcttttgg cca 443

<210> 668

<211> 524

<212> DNA

432/586

<213> *Drosophila melanogaster*

<400> 668

actgagagca tatttgtgca ccagagggct gcataacaac attctctttg tccattcggt 60
atacttcgta ttcagaatac atgtcattca gttgggtcccg ttctttttgc gttcacttcg 120
tatatatctg gcgatcgaaa tgaactaact gaatgtgttc aaagaatgaa tgaagccaat 180
gaattttcaa tagtaattca gagtgcttaa aattcttcat gttgtcattg agtaaaatga 240
gttcggacag cgccaaggta agtcgaagtt tgtgttttat tatgtttatt tgtattatta 300
tgtacactag tcggcatact tttgcgtgcg tcttataccg tgtgcgtctt atttaacaat 360
attgtaaaat aaaatatata aattatttgt tataatgccg taggggcctt attttgggta 420
tggatagtct tttggtcata gatatcatta ttctgaccaa gattggaact tttcaaggta 480
ttgcttctcg tattcaattc tagctggtct tacgtacgcg atat 524

<210> 669

<211> 537

<212> DNA

<213> *Drosophila melanogaster*

<400> 669

cgcgagcgaa tcgcgagcc agagaagcgg taaattcgaa ataaccgttt ggaaagagca 60
acatgatgag gttctttatt cgtttttagt aaaatggtag aaagtgaata tgtgatttaa 120
ttgataacca gcatgggcgc cgtcagtgtt aattgcgttc cgaattgctc ttctgaaaac 180
gcagacacaa atgcacacac acaaagtagc ggcaccacac cgatcgcaat ggcaaaagtg 240
ctgcagtgat aaaacaaatg cacagccata aaggcaaagt cggaaaagt tccaatgca 300
ctggcggccc atgcataaaa atgtacaatt tggcgtctct tgcacttgtc accgtcggtg 360
gaaaagcaaa aaaacctacc aaccaacaac aataggaaca taaactgaaa caaaaagaaa 420
accatttttg ctctcgctt tttgttttg tttggaccgc cgctcagca ctttcgcgct 480
cacacgcaca aactttttgc atttggtttc ttcaccggtt gcattatcac aacaact 537

<210> 670

<211> 459

433/586

<212> DNA

<213> *Drosophila melanogaster*

<400> 670

gctgggcaca accgatctcg tttttttttt agttctcata tttttttgtg ggtgtagaaa 60
agtttacgaa gtgcacacaa taacactccg taaatcgttt ataagttttt tgggccgtgt 120
gattaccagg taaacacaca cttaatgtaa gacctaatg gctgataaga tagctttcaa 180
ttggcaagat cgccttttca attaaccatt ttatcttgga aatgacagta ttatccgtta 240
tgaaatttta tctacttcac atgaagccta atatcatggt taaatgtctt cattcaattc 300
atcagcttat ttacaatga ttaactgata aagatattat aaattaataa tcttgtttcc 360
aaaccacgt ggggatgtaa gcaaaccag ttccgagcga aaccaattt tacctgggtt 420
ctattccggt ttttgggcca tattcttcgt attggcaaa 459

<210> 671

<211> 371

<212> DNA

<213> *Drosophila melanogaster*

<400> 671

cctctgccac aacctgccta tctctctttc tctctctctc tctctctctc tatgtgtgtt 60
tctctggact atctctctt ctggaacttc tctctctctt tcttcacaca cctacaccaa 120
aaaaacacat acacacaact ggactggacc tggccaaatt gaatgaccta cattcaaaaa 180
tacaacaaaa tacactgcaa aaaattattg tacctgacca cacattgaaa ccatgtaagc 240
ggtaggccag cgctttggaa acgagatgct atagtcacgg gaccgtccac cagatatgcg 300
cagcgggtaca tcacgcgcac gcaccatata agctaagagt tttggacaag tcactgaaat 360
gtacagaaaa c 371

<210> 672

<211> 551

<212> DNA

<213> *Drosophila melanogaster*

<400> 672

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ttctggccag gccaaaacaa tcaatgcgga gagcagacag tcgaagagag agagcgagcg 60
aaaaataact aaggggaggg ctgccacctt ttcttttcat tgtcttcggt tcattaatac 120
cccaaaaata tctcgtgcgt tgtgttaacc ttagacagac agctgtattt atttttaagt 180
agacaattat tttatttggt gcttgaggga aaagtttggg taataaagct aacgcgacaa 240
ccctgaattg ctctggcaac tccagctgt ttgcttactc tccatggagg caaacacttt 300
gttacagtgc tgcaaactaa gctatttcca agccaaatct ggcaactcat aaaagaagggt 360
ttttgcaaat ttcaaaatta ttattgtaat aactttagaa aattagcatt ggtcagctga 420
agaaattaaa attaaaccta tatgcctagt ttgggggtta aaaagggtatg gtttaatttta 480
attttacctg caaagggatt tattacaaag gttaaccctt agttatttat tcgctaaaag 540
tgttgccaac g 551
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<210> 673

<211> 382

<212> DNA

<213> *Drosophila melanogaster*

<400> 673

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gtgccagggtg agaaaagtgg agaagtgttg gaaaatactc acgaagctcc gtgagctctc 60
aaaattagac ttttagcaaa ctgtacaaaa cagcagggtt gtcacacgt gtcacaatat 120
agtgtcagaa gaatcaaaag ttgtagcaaa caaaatccga cgaatatttt atcactatcg 180
ctaacaaggc gttcgatatt gtgttggtgc ttgcaaataa tctcttctaa taatatcaca 240
cattgttgct agtgggtcaat agccgaattt tcgaagtcac ttgattcata ttactcgta 300
aaaacctgtg acgccgtgc tatttctatg attagtcaaa gcaactaaga atactacgaa 360
tatttacatt ctgatcgaat tc 382
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<210> 674

<211> 515

<212> DNA

<213> *Drosophila melanogaster*

<400> 674

gagtggccac aactgaaagc aaatgtagtg agaggtttga gagagagttg catcgaagag 60
aagaggagcg agagagctct tcggtatatt taattcataa aaattgagat acaatcgtag 120
tcgcggccat tgtttttcct ctttgggcat cgccgacaaa gaatttacta aagattttta 180
aaagcatttta atatgatttt aaattagatt tatctgttta tattgtttgt aaaaaaggaa 240
gactaattac caaatttatt acataaatta ttgcaagttt agacttttat atagacatca 300
tctcttcgat agtctgctag acttactgaa ttagtaaata aagtaaactg caccataaaa 360
gagtagcttg aaaataaaga gattcttctc aaactcttta agtctatgtt cgaaaaggaa 420
tctctggatt ctgcattaaa cacgaacaaa atgcatgaac tccttaaaag tcccgaatta 480
agtggagaga gaaacctggc ttaaaagaga agaaa 515

<210> 675

<211> 513

<212> DNA

<213> *Drosophila melanogaster*

<400> 675

gcccggactt tacttacttt ccgttaaagc ccatcgattt gtttgacgga aaccggtttc 60
cattgtgcca ttaaataatta atttaacttt gtggtcagtc caccatccg taataatgaa 120
tgtcggtttc ataggactag ataatagaca attggagttg taaaaacttt cataaattgt 180
agtgaagatg ctatgaacca tctaaattgt cacaatggtc gcaatacaac agttggaaac 240
actaaaaatg gttacatttg ttaataaatg aaatcaagag ttagttatat gtagatagag 300
taaacctgga aagatttgct gtatacggat tattcatcta ccagtatca cgtaaccag 360
tatttttgaa agccccttag aaatgggttg ttggattggg ggataagaag aaaccagaaa 420
cacagtcagt atcttttttag ccaggaaaca tgacgcgagc cagcaaagcc gcagaaataa 480
gaagccagaa cttgacagcc accgaggaaa ata 513

<210> 676

436/586

<211> 549

<212> DNA

<213> *Drosophila melanogaster*

<400> 676

acctgtagca taagcatcgt atgatacatt caccgcttca gtcaatcaca gttttgttcc 60
caatacaaac atgcgcatcg cggccaccaa agtcaaacac tgctggcggtt ttacttataa 120
acagaaaactt ttggtccttc gatgcggtc ggccgcatac ctcttttgat ttctgataat 180
gggtactttat tgcgggtttg tagacggtga tctatagaat cgtatcctat tctcgtccgc 240
catgcggagt gtgatttaac agaggagcaa aatttttcgt gcgtataatt atgccatcaa 300
gtttttgatt tgtccaagca ttaagtagtt cgttttgccg acctgcaaga caattatatg 360
ccttccatga ggaacaagat tggggaaaac cctgacgacg actttgctcc atatgaggag 420
aaacattact ctacatgggc attctaccgt agaattacgg caagggttaag accaaatgga 480
ccccgaccgg tattcaactc aaatacccgcc agagaaccag gtggggtgag cgaattaact 540
ttccaactt 549

<210> 677

<211> 339

<212> DNA

<213> *Drosophila melanogaster*

<400> 677

ggccgcggtg agaaaacacg gacggcacac agttgcataa ctttgagggt atgtgtgcgc 60
ccagtggaat ttactaatta aatgcgagaa attgtgaatt atcgctcagc atctgtgcgt 120
agaatttagt gagttctttt atttgcagtt tcaaaggcta tcccttcatt gtataacacc 180
tgctttcagg tctgtggtgt gtgtctttga gggtagaacc ggcgaaagct ttccagtagg 240
gcgttgaaaa atgagagggg tgcggggtaa tacaaattga caataattga cattgtttat 300
aaaactatag ttggtaatat cgggccacca acaactatg 339

<210> 678

<211> 582

437/586

<212> DNA

<213> *Drosophila melanogaster*

<400> 678

tgctggccgt gcttcttctt cttcttcttc cactcagtc attgctgttg ctgacgttgt 60
cggaataatg tgtcttgttg cttttttgct ggctgataaa taagctaaaa tatgtactta 120
cccactattt atgctagaga agtgtttgga attgtattta ttggcaatag attataaaaa 180
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gcctgggtta cattgtttat caaaatttaa taaggaaagg atcaaagaat atgggtcaca 420
ttattatgta attaaaaagt tctcaactca aaaccagggt cataggattt caactatgct 480
atgcaatagc taacgtataa aatgccagcc tatggcctat ttggcgactg ctttggtagt 540
agtatcgcta gtgggcatgt tttccaggcg ctctgcgccc aa 582

<210> 679

<211> 323

<212> DNA

<213> *Drosophila melanogaster*

<400> 679

cccaggccag cagcaaccca gggagcatcg atcaacagaa cgtgaacatc cagaaggccc 60
aggtttccgc aatcatgagc ttctccttga tggcccgatc agatggcgac gagaacaaga 120
cgaacaacgt ctactacatg cgacgttttc tctcagcccg actatttaac cacatggttg 180
gtactgagcg cgtgtcgtcc gaggatacga tattggccat gatgcgaacc cattacaacg 240
tggaacatca gatccccgaa acagagcccc cggtgaagct gcacaaacag atcgactttc 300
ccgctgacct acgectcgaa ttc 323

<210> 680

<211> 521

<212> DNA

<213> *Drosophila melanogaster*

<400> 680

acacaaaacgt acatacgtat cgtaagctca cagtaacttg tgcaaaaacc acaacctata 60
aagtggcaac gtgttgcaag acagttgtcg atttgtagtg gggaagaggt tccgtcaagt 120
tggacgggaa gaattatggt caaacaggtc actgatacgc gatggaacca cagaaacata 180
caaatttcag atcagtctac acaaactggg gtaaaactac aacttagata tgatcaaaca 240
agaaacacccc ttacattggt gatatacgag acgaccatat cggccatttg gtagctgtgt 300
tgtaatcttt cgaccgctgt agtgagtcga ttgccttcac agagtcaaata ataataaat 360
tttcacagcg acgtacatat gagtctgtta gtatgtcatg aatgtggaag ataacatatt 420
aagaaaatta aaacgaatca acacattaat ccaatgtata ccttccatct tataatatca 480
aatgaaatat ggttcacaca atacatatat ttatccaagt a 521

<210> 681

<211> 722

<212> DNA

<213> *Drosophila melanogaster*

<400> 681

gcccacgaca ttgcagctcg aacacacagc gctgtcactt tggttcgacg cgttcgttcg 60
agttggcact gaacatctga ttggatcccg aggtgaagtg tgcgaggcaa cggcacgatg 120
ctgctcgttt ggcgcccgtg agcgacgctt gcgttagagg agcacagata taggggccgt 180
agcacgaaat tcaccttcgc gcgcttttca caatcttttc ggtatttaata ttaaacaatcg 240
taagccgtgc ggtattttta attagctaaa gtttagtaac gaaacttaac agcaagctaa 300
cttcaattag gaaatatatt tatattctcg taaatgattt cagttccaca aagtgtttcg 360
atttcaaaaa taatttgcac aatattgatt ataattaaaa gattatgtat tttctttttt 420
aatattttgt ttttatgcct taacacacaa tttttacagt aattatcttc ctatgatgtg 480
acgtcacgtc ataccatac acacacgttc tccattcgtg gacaccaaca caagcgaaga 540
gtacattcac gtttttcatt caaacattac tcgaacagcc ttcttagttc gacgccactc 600
tgcgaaaaag tgcgaaatac agagaaaatt gccctaggcg cctattttta acttggtatt 660

gccgcagaaa tgtattccaa attaaaaggg ggattccatc aaaaattaag tcggtaaaat 720
tg 722

<210> 682

<211> 860

<212> DNA

<213> *Drosophila melanogaster*

<400> 682

ccagaaacag aaactgagtt tcttgctaaa actcagttgg aagccgaagc gagttcgtgt 60
atccgatgga tactttcgtc ggtggtggat tttctgcggg gggtgactgc gtggtgcagc 120
aacattgccg cgactgttgc aacatgttgc ggcagcagag agaggtgccca ccaaatttcg 180
gtttgcatcc ccgagcataa aaacgtgcaa tttgatccag gattcttcaa cctgtaggat 240
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gctttgcatg ctcaaagatt taaatcgact caatttatta aatgtgatat ttatataatt 360
ttactactat ttattaaata aatgttaaata aaatgtgtta tctgtgcacg gggccaacac 420
ctgtaatcgg aattagtttg cgaatctaaa gatggtggaa cattatccct tacgggtaaa 480
acttgaacat aaaattgcta acttataaat ttacatgtgg tgtattcatt tgttaatat 540
aataaataat attccatata gcctagtttt tgtgtccac caataataat tcattttctg 600
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cgatagtcta aatcaacgca atttatgttc agaaacataa tatgctaaaa agttcactgt 720
caaaacaaa aatggtagta caccattaaa accgaccaa ggaccgtttc catgttatga 780
tgaggtttca agtgtcaaga ctgttaaggg aatagtttca attcgaagcc ttagggatga 840
atcatttcca tggggaacct 860

<210> 683

<211> 570

<212> DNA

<213> *Drosophila melanogaster*

440/586

<400> 683

agctgtactt cagtagacat ttttggtcga aactggtttt caagtacgac gcttacgtcg 60
ctgtcgacgt cctcgttggc gatttatgcg ttgggttttg agttgctcca agttttgctg 120
gctgttgcaa ctttcgtctt attttgtttt gttttatttt taatgtgatt tatgcatgtt 180
cctcaatgtg tgagtgtgca aaaatacttg aacgaaatta ttgcagcttc tttttttcgt 240
acatttattt ttgtggattt tattgttggt gttgtcgca gcgttgacag tcgcagcctt 300
cgatttattt ttaatgttta tgtctgtccg attgtttatg atttttgttg ggttttttgc 360
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gatcgcactg agtactaaat ccccgccatc ctcaactcaa ggcctctcca tgctgttctg 480
cctccgtgac tgcataaatt tagtttgagc aaacgcgata gataagatag caagcaaaca 540
gaccgcagca atcgaccgaa ccgtcagatc 570

<210> 684

<211> 485

<212> DNA

<213> *Drosophila melanogaster*

<400> 684

caccaggata ataatcactc tcaactgaga gcaactgaga gaggaaagct ctaatgggaa 60
aagctctcgc cagctgaagg gaatttcctc atttcgctta cttttcaatc agaaagagtt 120
tatecttcgt gcttgatgga cgcaacgttt aattcgcgct tgttctgtaa aacaaagaaa 180
accaaaaaag taattttcaa tcgcatgaaa ctcaattgtta ttgaactccg tttgttttcc 240
aatttgttta accccaattc cgacgctcgt tgtgtgtttt tgtaacgaat gcagtgaata 300
tcaagtgaaa acgtacaacc agaccttggt cacatatata ttatatggtg gtaaccaaac 360
agtgttctc tatttggcgc ctaaaaacgg aaggatacct cgtggcttaa atcatcagct 420
ctaggtaaaa tacatcctcc gaaatcgtgg ttgttgcaatt gccgcttttg tgtaacatcc 480
cgagt 485

<210> 685

<211> 22

<212> DNA

441/586

<213> Drosophila melanogaster

<400> 685

ctccggccac acggatgaat tc

22

<210> 686

<211> 378

<212> DNA

<213> Drosophila melanogaster

<400> 686

gcttgggcta taattattta acgttgcctt gtcactgtct gtcctctctt ccgctcctgt 60
tccctcccca ctgaatcctt ttgccacctc ctgcgcactc ctgtttctgc ttccttcttt 120
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ggggtgggtg tgggtgtgtg caaccctcg acgcgactgc ttgtgtgtgt gcgtgtgggg 300
cgtgcttttg tgctgtgccc tgttttgtat gaaaagtga ttaaggcgaa tttagcgcgc 360
gtcgggctca cgttccaa 378

<210> 687

<211> 504

<212> DNA

<213> Drosophila melanogaster

<400> 687

ctccaacgat taactttaca tcttttgtat gcacgtcgtg cgcttcgac ttgtttattc 60
ctctctcttt ttatttgtct atctctgccc cttccacgt gtgtgtatag tgcttttttg 120
acagttgaat gaaccaagc atttattaaa aaaaagaaaa aaaaaactaa ataaaagcta 180
tcacatacaa taacaaacag aaagagcatg caagataaac gaaaaaagct acagttgagg 240
ataatgctgt agttgtactt ggatacagtt gggaaaagca gatggagaca agaaaatgat 300

442/586

taaccatttt gtttgagaca ttccattgta atttagtaaa ataaatattc agcattactg 360
atactgcatt tttccccaga ttgatcccca caatattatt cttttaattg ggccgtttcc 420
ctaaaatgta tttaaaatgt tttagcttgc tttgaaatgg agtttaaccc gtgtattata 480
ttatacagtt gttcatttga attc 504

<210> 688

<211> 427

<212> DNA

<213> *Drosophila melanogaster*

<400> 688

aatgagttag tgccgtacga taggtgggag gtgagcaatt gcacaggaag tgcccaacag 60
agaaagagag agagagggac agcgagagag attgctacag agcgggagag agcctggcaa 120
agtgtgagag aaagcaggca ggtgagagaa gatagtgtt acagtgggtg gatggaatat 180
tgagttacct ggtgattttt ttagccttga tattatttta aataatctag ctaacaataa 240
ataagctgca atattgaatg tctatttatg ataataaaca aatctctttc ctttttccga 300
gggattactg taaccgacat agaagatggt ataaaatcat cctttctcac ctttttctt 360
tttctctcaa ttcgctctct atttttctct cgggtggcggc gcccaaaaca gctgcttgtt 420
gtttatt 427

<210> 689

<211> 157

<212> DNA

<213> *Drosophila melanogaster*

<400> 689

gtctgcactt tcatggcgga aactcgaaag cgaaacaatg ccataaatac aacaaacaca 60
cacacacaca ctcacggctg ccgaaactaa aatagataaa caaattcgga aaggaacaag 120
gaaaaacttt tacagaatgc gactgcagag ggaattc 157

<210> 690

<211> 408

<212> DNA

<213> *Drosophila melanogaster*

<400> 690

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gtttgagcaa ttaagactc caattatatt cgatatttgt taatatatct ttaaaatgtc 180
ggtttctcat gcattttaag gaaagagaaa aacgaaagag acaagagcaa caagtttcga 240
aagctttttt accagatggg aatgcctcgt tctcactgcc agtgttgtta aatcaaaaaa 300
agcgccaata ttgatgtttc tctctctctt catattgctc gctctttccc acccttttgt 360
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<210> 691

<211> 455

<212> DNA

<213> *Drosophila melanogaster*

<400> 691

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gaagcaaagt gcaatatgca gagcgagtgg agtggaatgc atcacacgta cgcactcaca 180
gatacattcc catgtattgc aggcacccgg aagttaacag atacatatta attgcacttg 240
ctccattaag aaatcacaac ttttcgattt gatggtcgaa acataaaatt gtttttactt 300
gttatgttcc acttttgact tcttaaaccg cgccaatttt gttaaattaag agttattctg 360
aacggaagca aaagctggat ttccaaaaaa tcagaaacca attgatcgat ctttcattta 420
gaagcaatta cagcgttact tttccaaatt gaaat          455
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<210> 692

<211> 686

<212> DNA

<213> *Drosophila melanogaster*

<400> 692

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gagtgtaca gggagagaga gtgaaaggag agagagcggc agaaaggcag ggaacgaggg 120
cagcaacagc cgctgagata caaatacaaa tttcatgacg ggcaagccgg cgttggttcat 180
gcatttaccg ctagttcatt ctatgcctct ctcattcgct gtgcctgtgt gagttgggtt 240
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tcaaaacagc aacagcgcaa atagaagtag aaaccgggaa agtgagacaa gtcgactttg 360
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aacgttattt cacattattc agaaaaaaaa tggttatatta agtaatggga ataaatttag 480
gaaaccttta gagttaaaaa tgtcattccc cttatgtcga tacaatgcag tatacccgctc 540
tgctctatta taccgggtat aaaaaccacg ccaccaaagc gaatgagaaa aattacttca 600
accaacggaa ctacactgaa ccaaaagaac agcgaaagga agacgaacag gcttggttgg 660
gcacggccaa gtgatgaatg gaatgg 686

<210> 693

<211> 927

<212> DNA

<213> *Drosophila melanogaster*

<400> 693

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gttccgttgg cgcacgcgct atgggagccg cagatccgaa tcgcttaaatt tagcccgcca 120
gtcgccgcct tggagcgtgc tgaggcgctt gggaaagatg gtgactcaat tggattttcc 180
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cttgttttaa tctacttgca tactttaggg gatctattaa gcttgtggtg catatattta 720
ggaggtttcc aaattgtatt tttatgagcc taagttaatg tatataattt cagcttccac 780
tatectaaaa tgggttaattt gaaatccatt taagcagtaa aatttttaag ttagcaccgc 840
gcttaactaa cttcattaat tactttcagc gaacgggtta aaggtaccac ttaattagta 900
aacatggatc atccgttggc tggaaaa 927

<210> 694

<211> 355

<212> DNA

<213> *Drosophila melanogaster*

<400> 694

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gcgagacata cgaaaatcgc tcagccggga tttccatgc ggttagagc ggttttatgg 180
acttttcaca cttccgattg tttgtcattg cttttgcgct ggtcaaggag atattttggg 240
atgtgtgaaa ttccgtgacg gataacggaa gtgtggaatt acttaaaaag tcaagggtgca 300
aattggcatt attaaaacga aattaagtca agggagttgc atgtgaaatg aattc 355

<210> 695

<211> 201

<212> DNA

<213> *Drosophila melanogaster*

<400> 695

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cgcagagaat cctcctcgt gttttggtt ttatttacca tacgcgcact tcttcatcca 120

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ttcccattct cagcgtgcac tgataaaaat aaatataccg aaaaatccca cttctcata 180
ttaatatattt ctttcgaatt c 201

<210> 696

<211> 114

<212> DNA

<213> *Drosophila melanogaster*

<400> 696

gtctgtcagc tttgtgtcgc ttcattggcgc cttgactcgc cggcggcttt atttgccata 60
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<210> 697

<211> 696

<212> DNA

<213> *Drosophila melanogaster*

<400> 697

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ccaggcgggc tcccaccac aatcagtcgg ggaacacgtg ctccaaaata tcaacaaaag 180
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caaaaggcac tttcaaattg gtaagtactt tgcgctgcac gagcatgttt tatttatttg 300
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cagtggtcgc ttttgttata attgtgagac ttgaaaacga tcgccgtaaa attcacattt 420
ttaacaaaat atttactgtt cgaaagaggg gttttttgcg aatcgatgat tagttgacgt 480
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atgatttaaa gtttgcgatt tccttggtaa atacatgaaa gcgtatacag gtattactat 600
taccaaatta taacgattta atatgcatat ccttattatt aatggctctt gaaataccct 660
aatgtaaaac tatttaagca atgaatacat tattaa 696

447/586

<210> 698

<211> 786

<212> DNA

<213> *Drosophila melanogaster*

<400> 698

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tggaagtgtc catatcgctg cgatcacaag cagcaaatat ggaagattaa gcggaaaacg 120
aaagacaaaa taattacaat caaacaaccg aattataaaa agaaaatggt ttgtcctccg 180
agttcggttta aatatgctta tctacgtatc aattaaaaaa accgtagaaa gaaattcacg 240
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caaattacca catcattaca ataaattaaa ttgcttatta ttgtattttt actgggaaat 420
ccgtgcaaat ggaattacaa ttcagctgga atcgtcaaac ttacaacata aacttattgt 480
tcttttcgga caaatgcttc gaggagcgtc tggcgtcaag gaagagcgag tgcacatcct 540
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tgtcggcagt ggagtagagt agtgtgcgga tgatcagcaa acgatcgagc agatctagcg 780
gaattc 786

<210> 699

<211> 574

<212> DNA

<213> *Drosophila melanogaster*

<400> 699

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ctactgctgt gcctcacttt gtccatgcaa tctgaagcgt tgacaaaatt gaagtaaaaa 120
aatgcataaa atacttgtag gcaaataata tccgaaacta ttataaaatc tatgctcaag 180

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tctacattcc tgtatactaa tttaatcaaa taaattactg cagtgcgcag tgtgaccatg 240
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gccctttaat tttaatataa tctcaaatgc cagtgtttct attgaaaaat caacgtagg 360
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attcaagttc ctttgacccg agtcttgaac ttttcccttc acctcccaca aattaggcag 480
cttgaaagcc aaaaggcgtt gattgatttg aataaggttt cagtaaggcc cgagaaaagg 540
tgcgatgat ggaaaaagtg acgcccgaag gttt 574

<210> 700

<211> 621

<212> DNA

<213> *Drosophila melanogaster*

<400> 700

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aaaagggtagg agtccatttt tcaattccaa tgatccacaa aaaaggcagc ctgtctgccca 180
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cccttgacaca agaagttcca gagagagaga gcgagagcgg gagaattgca ctggaaccga 480
gtgagcaaca acaaagggcc gtccactggt gtgttggtta aatgccaata ttgccggggt 540
attaattaaa acaaaggcag ctataaaacg taaaaaatac aaaaacgaga acaaaaaact 600
tcattttctt ccacatacac a 621

<210> 701

<211> 366

<212> DNA

<213> *Drosophila melanogaster*

<400> 701

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catacaaaca cacatatgta catatataga tttgtatata tacgggttaca gggttacgttt 180
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aactgaaagc tgaggccctt cgagaacatt tggcgatagt cacattctat atacatacat 300
atatacaatt ggacagctgg atttagataa ggacctaatg aaatgccatt atggttccaa 360
aataat 366

<210> 702

<211> 469

<212> DNA

<213> *Drosophila melanogaster*

<400> 702

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acagattggc ttgggttgcg taagtttggc gaaacgatat atagccatat agcgacggct 120
atagcttttg cctcagattt tgctgtagct tcaggtagag atacagctgg ccatggctgc 180
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tgtttgactg cgaaatccta tatctagatg ctttgtcatt cattctatac cgccaggcat 360
gttgacctgg gtgcgcgccg gtaaacattt tcaaatttgc caaacatatt tataaaatcg 420
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<210> 703

<211> 963

<212> DNA

<213> *Drosophila melanogaster*

<400> 703

450/586

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ttacgaagac aggaacaata aataaatagc agttaaataa atagtagaaa atgccatata 120
aaatatatgg gaattgactt taaattacat ttttgagttt tcaaaataaa aactaaattt 180
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aacaattata aaaagtcata ttgctcggtt tttttttttt ttttttcgga taaagttttt 960
tct 963

<210> 704

<211> 431

<212> DNA

<213> *Drosophila melanogaster*

<400> 704

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acgtgtgttt gtaggggctt tgaatggctt aaaacgccta cgaaagcagg gattgtgttt 180
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ccgttggaat ctgttttttt ggctagtgtt gctcgcatth tgacccctt ttatttagct 360
tgttggcact tttcagatga ctcacagat atggctacga gtaaatggga ataaaagagg 420

gcaatattgc g

431

<210> 705

<211> 754

<212> DNA

<213> *Drosophila melanogaster*

<400> 705

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ctgtgtattt tttttttttt gctattttta aaatggattt cgagagcaaa tactgcacca 120
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cttagaccat ggcaagtgtg ccaggagatg ttgaagatac atccctttac catcgttcga 660
gtctacgagt atcaattaga ccagttcttc tatatatttg agtaccgcaa caacgactcg 720
gcccgcaagt gcccatcagg agagtaagga attc 754

<210> 706

<211> 156

<212> DNA

<213> *Drosophila melanogaster*

<400> 706

tctgtacaaa aaaatgttca gccattttgg attcaattaa ttcattgtcg cggtgccagt 60
gcgacggcat ttcgagggtt gttacgcacg gccgtggaaa cgtaagcagc tgaggtcaca 120

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ctaaacacgc gatctggcaa taccacaatt gaattc

156

<210> 707

<211> 989

<212> DNA

<213> *Drosophila melanogaster*

<400> 707

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taaaccacaca cgtagaaaaa ttttagtgga tcatgaaaat caatttagga taacattctc 120
agtaacaaac taaatgcttt cttttatttt gtaatcggtt ctatgaaatg aaaatgtaca 180
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tgtaaaaatc tggataatca ttacatttt 989

<210> 708

<211> 183

<212> DNA

<213> *Drosophila melanogaster*

453/586

<400> 708

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tgattccatt tcttttttca tgtttttctc ttcttttttt aatggactat atattcacgt 120
ggccccagca aatccacaat tcagtctgat tcccaactct gagacaagcg gacgtacaag 180
tgg 183

<210> 709

<211> 304

<212> DNA

<213> *Drosophila melanogaster*

<400> 709

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gtttcgatat cgactgtttt tagtatggct gtattttgtc agtattttta cgtaaatatc 120
taataattgt tagtatacaa tttcaaagac cgcgatattc aaaattgttt tcaagttatt 180
ctcatttttta tttaaaaata ataaaatcgt tttttcactt tgtttacaaa tgaattttat 240
gtatgttctt tttctacaac aattagattc ataactgatg atattttggt ttgctttcac 300
atag 304

<210> 710

<211> 855

<212> DNA

<213> *Drosophila melanogaster*

<400> 710

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gctgcctgct cgctctctgg aaatttggtt gtggcaacga tgacgtcggt actgttatcg 120
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<210> 711

<211> 825

<212> DNA

<213> *Drosophila melanogaster*

<400> 711

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agccaagcag agacctacc cctcctctc cctactocta gcggtccact caactaaacc 120
tcgtacacco gtgcactcca acccccacc actccccgcc tatgtacaat ggcataagat 180
ataagatatg cgcattttctt ataatgtcga accgaaacgt ggcgaaataa atgtttgttt 240
gctaagctgc gtcttgcttg ccttttgata atttaaaacg tttttattct gtcccaaagt 300
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cagagcaaca actttttact actattccat gactgcatga aaataaatat acaaactctaa 480
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taaagatatt tatgattctt taatgtaatc aaagtatgac tggtttgtaa tgcgcaatat 720
aaagaaagta tttagtttaag tctttatctg caaggctgat acaaaactaa tatgcaaate 780
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<210> 712

<211> 798

<212> DNA

<213> *Drosophila melanogaster*

<400> 712

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<210> 713

<211> 797

<212> DNA

<213> *Drosophila melanogaster*

<400> 713

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ccagacgacc cgcgatggag gtaaggcgtt gtccaagtcc cgtttcgtct atccggagga 180
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 cttggataac ctctggatc gaggtcgcca aactgggaga cccaaaacga tatacatggc 720
 actggagaag cgctatgtgt tcacactgga ggattgcgat tcggtggctc ccatgtatga 780
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<210> 714

<211> 491

<212> DNA

<213> *Drosophila melanogaster*

<400> 714

gaatggcttt ttactatcct ttcactgtcc attttaggat ttatttataa caaacgaagt 60
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 atgatcacca caatttttgc ccatttcgtg ttaccttcta ccaacgcgat tacctgcggt 480
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<210> 715

<211> 1013

<212> DNA

<213> *Drosophila melanogaster*

<400> 715

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<210> 716

<211> 902

<212> DNA

<213> *Drosophila melanogaster*

<400> 716

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gtggcagttc ataataatTT ttcaataacc ccaaagtGag gctctaattt ccaatttcga 180
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aa 902

<210> 717

<211> 64

<212> DNA

<213> *Drosophila melanogaster*

<400> 717

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attc 64

<210> 718

<211> 526

<212> DNA

<213> *Drosophila melanogaster*

<400> 718

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tataactgtt tggcgtgagg gagcacgaaa ctccagtgga gacttctccg catcgccagc 120
gaaacaaacg atcaaaatga atactctgat aacgtgtgaa ggtgagcaac aaaataaagt 180
ataagaaaat accgccacga aaacaacaac aatagaaatg tcgacgcacc cttttctttt 240
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tcccccgctg gaagtggaag gaaaggcagc ttaaagagga gcgggtggct tccagtatgt 360
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atggcaattg ttgcttttgt ttctgagagg ggggtgtgaa actcataaat atcagctatg 480
gcgaggggggt gggggggcagt ctttgctgac gtaccgactt ttaatt 526

<210> 719

<211> 143

<212> DNA

<213> *Drosophila melanogaster*

<400> 719

gatcagcact cagagtcagt tacttttttt cgctccatac gtgactcaca attcgcgtgt 60
ctttcaaaaa taaaagcaaa agaagcggtt ggattcggtt ctgatggctg gataaatgaa 120
aaaaaatcag tcagagccaa caa 143

<210> 720

<211> 110

<212> DNA

<213> *Drosophila melanogaster*

<400> 720

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aaataaaaag atcgcagaac aaaaatcgaa tcaacaaaca aaaggaattc 110

<210> 721

<211> 1070

<212> DNA

<213> *Drosophila melanogaster*

<400> 721

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atctgtcgtg gatttggtt tcttaatatc tcgacgttcc aataatataa 1070

<210> 722

<211> 765

<212> DNA

<213> *Drosophila melanogaster*

<400> 722

accagacca tctaactaat gagcaggcaa gactcactt accaagccgt acacacacac 60
acacacacac acacatatat atgatgtgcg aggcggacag aagctgaaac tgatgcgata 120

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cggacacggg tcttgtgttt cagttctctg tgtggcatgg ccaccgtggc cacgttggac 180
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gatggggccg actgccagag acatgtgttg ctggttecta tatggctccg tagttgggat 720
ggctaatagcc gccgacaacg acaacgcccc atttgatca cacac 765

<210> 723

<211> 568

<212> DNA

<213> *Drosophila melanogaster*

<400> 723

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tgccgatgat tttgatttcg ttacttttagc cagcgtccgc gtcagttcgc tctatgtgat 180
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cgcttttttg gcctgggtgat gtgggaaatg catttcgagt gcgtgatatc tgtggcgtct 480
ccagtggtta agtaatagat actgtagtgc ttcttcctct tcttcctggc ccaccagta 540
atcccaagac cgcaagaag agagggtt 568

<210> 724

462/586

<211> 580

<212> DNA

<213> *Drosophila melanogaster*

<400> 724

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atagccaaag aataaagcca gaacgacgaa agcaacaact tataatctatt tttaaattacg 120
ttcaattaaa tgcgcttcac ctacaaagtc tgcgacagtg acgtcaatat cgaaaataat 180
tgataacctt cgatcacgat cgggaagaga ttgtaacaga cttgctttga tggctcgcat 240
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gttctctgtc attgccgttt ttatcgctc cggcgcttcc taccctcttt tatacataat 480
tcaatgataa aatgtcaaaa atcaataaca ataaataaat gataaacgag agtatcactc 540
ccgtctttgt attccaccaa aaataaatat cattccgttg 580

<210> 725

<211> 403

<212> DNA

<213> *Drosophila melanogaster*

<400> 725

ggcacaacaa accggttaact ctgaagaaat ttctgtcgtg tttaacagaa tctaacgaaa 60
gagagagacc actgggctcc tgtttgctc tccgccttaa aacgtgtttt tcacaactca 120
caaaaagttg taaggaatgt ctcataaaaa agttaaatta ttacacact cgaagctgaa 180
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tgttccagag ccataattac aagaccgca aggacagcaa taaaccaaac aaaaatattt 300
attgaaaata aattcattct acattcaact tcaacgactt tgactcgaca cttaattggg 360
aataagagca aattatcggt aaaaacttat gtccattgtg ttt 403

<210> 726

463/586

<211> 465

<212> DNA

<213> *Drosophila melanogaster*

<400> 726

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attgggcatt aaagtacaaa acttgaacat ccaaatgagt tgggcatatc aatatatcgc 420
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<210> 727

<211> 52

<212> DNA

<213> *Drosophila melanogaster*

<400> 727

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<210> 728

<211> 490

<212> DNA

<213> *Drosophila melanogaster*

<400> 728

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agaacatact 490

<210> 729

<211> 1153

<212> DNA

<213> *Drosophila melanogaster*

<400> 729

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atgtgttcat tcatcgggct ctttttccga tttcagtggtg tggcatttaa caataatccc 180
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<210> 730

<211> 1144

<212> DNA

<213> *Drosophila melanogaster*

<400> 730

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<210> 731

<211> 858

<212> DNA

<213> *Drosophila melanogaster*

<400> 731

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aaagaacatt ttacgcattt gaattaattt attaagttct atctcgaatt atgatctaaa 240
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858

<210> 732

<211> 882

<212> DNA

<213> *Drosophila melanogaster*

<400> 732

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caagtgccgt tatttcgtct tgctttcttt aatcgaatat atttcggtct cttcttttgc 120
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agcagttctg tttttttagt gtgcgcggaa gtacgttctg tttgtatact attacctcct 180
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tttttatgcc agttaatacc gagcccacag aaacctcaac ttgacacaga tgttctaggc 780
agtgatttta ttaaaaaact tttgcaatta aatgcataaa ctgtaaaaaa caaagcggag 840
tgcaggccat taagcccca aaaaaggctt gatgaaggaa at 882

<210> 733

<211> 532

<212> DNA

<213> *Drosophila melanogaster*

<400> 733

ggcccgagca gctgacagtt gcgcttcagc attagaccaa agtagtttga ctttttagtt 60
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gcagctgcac ttgcagcgag agacagaaat acatttcgta caaaattccg ccctgcattt 180
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caagcgagaa caagacacac acgtggccat caaagcggta tcggttcgcy tcgcgtttgg 300
cctaaaattg taaacagttt tccttttaca acaacgaaga ataccagaag aagcaaagcc 360
aaaaacgcag cttgcagttt gacgtcgacc gccaaagtgt agctgctgcc atcgctgctg 420
cagtcgcccc gacgggtccg tttctgtttg ggcccatttg ccgttgacca gctttcagtg 480
gttcatttcc cattcgagtc ggcaacaacg agccggggaa gtcgcagagg cc 532

<210> 734

<211> 113

<212> DNA

<213> *Drosophila melanogaster*

<400> 734

ctgtggcaca agctaaagag agaggatgag agcgagcgcg atcgaagaga gagcgccagc 60
tgctcccatt ggagcagcta acgtttccaa ttggaccagc tcaaaggga ttc 113

<210> 735

<211> 1145

<212> DNA

<213> *Drosophila melanogaster*

<400> 735

ggctgatgca acacttgcca cacgttgcaa cagctgtttt agtctggccc agctgattcg 60
tattgttggc ttgttgccag agactgcgaa aatctcttgg caacatgtag ccacaacttt 120
tggaactc atagtgttgc taaacatgtt gggcgaaatt ttcacaccga tgcagggcaa 180
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agcatttggt gtgttgatga gattaaaact gggaactggg gaatgggaat tgaatgccgt 1020
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<210> 736

<211> 447

<212> DNA

<213> *Drosophila melanogaster*

<400> 736

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tataacaatg tattttttcc ttgttaatgt aattgtaaat ctacaagggc atttaaatat 180
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gaaaacgatg cttcaatttg aaaattttgt aatcgaagca atcaagttgt acatttttgt 360
gactgaatta gtagttatat tgttatcaca ttctatttat attagctaaa atgttaaatac 420
gataaatatt aagttttcgg ggaattc 447

<210> 737

<211> 551

<212> DNA

<213> *Drosophila melanogaster*

<400> 737

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ccgtttttcg gggttggtgg gtggtggttg gctggttttc actttccacc accgccgcca 180
accgctcgct tttcattcgg tggaaaactg aacagatttt tggcgctaaa atgagaaatg 240

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tacttgatta gattaaatgt cttaaaaata tatgtaggag tttagacttt tgtaataaag 420
cttcatttcc atagaaaatg tttctatcaa gccgtatttt ctttaaacta ataagaataa 480
taataacatg tttctaactt tatagccaaa aaggaatata tattctecta ggctttgggt 540
ccaaaattaa a 551

<210> 738

<211> 885

<212> DNA

<213> *Drosophila melanogaster*

<400> 738

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<210> 739

<211> 1083

<212> DNA

<213> *Drosophila melanogaster*

<400> 739

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cctgtacgtt tttattttgc agtactcgac tttattgtta ttattatttt tcgcgactct 180
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<210> 740

<211> 1796

<212> DNA

<213> *Drosophila melanogaster*

<400> 740

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tagtcttagg tatgaagccc atagtggcag agagaagcat atgatcatat ccccgtagg 180
aataagaata ttattgttat ctgctctta cttataagct agcgtaaga gataagaatg 240
tacacctagc tcaactcaca acgcatacac acttcagaga gcataagaaa agaggaatcc 300
gcgagacgcg gcattgggtg gcgtgtgctt aaagggaaaa gtcgaataaa ggcattgtga 360
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atcttatagt aaatgttcgg cataatgtat gtatgtaacc ggtataagga agcctttccg 480
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atcgaccaat cagtaatgaa tggcaatgac cccacttctt aggtagtact ctcattaatc 1740
gaaatatgac tgttcgtttc tgccataaat atcccctagg ctggcttgtg gcatgg 1796

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<210> 741

<211> 819

<212> DNA

<213> *Drosophila melanogaster*

<400> 741

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cacatgtcta ctatctactt gtgtatttat accgtataca acttaaattg aaattttggg 720
ggaattaaaa tttaaattgaa acccaattgg cttggtaact gttgataaat aaattagata 780
ggaaaacggg taaacaatat taatcgaata aaaagcctt 819
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<210> 742

<211> 1003

<212> DNA

<213> *Drosophila melanogaster*

<400> 742

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tggtgttgct gccgctattc taaccgaaaa ttctcaagag gctgagtttg gaaataaagc 120
gaccaaagg ctggtcagca tggataagag cgcacgcaaa attataagat gatgtaaacc 180
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actagtcagc ggagatcacc ccgtaccggg gttctggaaa gcctctaact agagtttcca 240
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gaacatcaat ttcatgttca tacggacgag atttttagtaa taaaattatt atttttatac 480
atttttaaatt gaaattatag atataataaa tcatacaatt tttaggtaaa acatttgtat 540
aaaatttcag atgcgtagta ttaaaaaaaaa ctgaaaaatc ataatccttt ccttaacttg 600
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cagttttctt tccaaagacc atcaattttc attcccaaag cctgggaaat tgcttagaag 960
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<210> 743

<211> 384

<212> DNA

<213> *Drosophila melanogaster*

<400> 743

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ggaatatcgg tagtggcaac gccgttacga acggagaacg gagaaggata tgtgaagggt 180
caagatgccc cgtcgagatg cctaacgaca ggctgagacg ccaaggctga gaccagaagg 240
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cttaaaactc cccacaaatc ttcgtgtagg gggagccggc ctaacataag ccgcggttgc 360
agggcaaagc ggagagaacc gtga 384

<210> 744

<211> 1040

475/586

<212> DNA

<213> *Drosophila melanogaster*

<400> 744

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atgagatcgg ttttgccctt tttcgtctaa tatactatga agtgtctcat ggtaattcgt 180
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<210> 745

<211> 519

<212> DNA

<213> *Drosophila melanogaster*

<400> 745

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tatacgtagc tacacatoga tgtctaactc aactcctccg atcgacagct attatgtggg 480
gggttcattt ggggtctggt tgggtgaatt ccgcggaat 519

<210> 746

<211> 597

<212> DNA

<213> *Drosophila melanogaster*

<400> 746

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tgtgccacat caaacaagg gaggaatttc atcatgaatt gaaaatgaat ggggagaaat 180
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<210> 747

<211> 99

<212> DNA

<213> *Drosophila melanogaster*

477/586

<400> 747

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atactacaac tgaaagtggg ggggtttttgg gtggaattc 99

<210> 748

<211> 580

<212> DNA

<213> *Drosophila melanogaster*

<400> 748

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caatagctta atgattggca ctagaattaa atacttatat gtattgttat caaaacatat 240
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<210> 749

<211> 1036

<212> DNA

<213> *Drosophila melanogaster*

<400> 749

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atatattgta tttatttgtg gtcgcgctgc ttttccttac gagccgaggc acatgcacat 180

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gcacacatgc tggcttttaa ttgaaatgaa cttaaattag cgcgaggta ggcaaattga 240
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gagcaactac gacacgctcg ttgttgctgt tgttgctgca atcattatta ttttgaggct 660
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accagagacc gaaaggcaag ggggtgggag gggggcttct ggggttgggc ctttggtagg 960
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<210> 750

<211> 1091

<212> DNA

<213> *Drosophila melanogaster*

<400> 750

gttgcggtgc agccttttgt tgttattgtt ttgcggcggc aagtgccggt tctctgctgt 60
ccgtctccct cactctcacc cggcttcgcc cagtaacaac aactaaagca caacaacacc 120
cggcacttaa acagcgaatt ttcaagggga tgggggtatc tacaggagga ggaggagcag 180
ggaactaagt gggagggggcg ggcgaaaaag gcgcggaatc tgagtacaat gtttttacgt 240
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cagtaaatat tgcagcctcc ctcccacgca cacacacata cacacacact cccaaacgaa 420
tacatgtgca caaaacgtga cgagccctc tccatggaat gagtgggcag tgggtgtgtg 480
gaatgcggtg gggtaggaga ttggggggagg gagatagcta gcacaaagcc accagcgaca 540

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accgcaccaa caacagcatg aaacacatgc cgtggaggcc tgcacatgga aatactccag 600
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caactatttc a 1091

<210> 751

<211> 495

<212> DNA

<213> *Drosophila melanogaster*

<400> 751

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atacattaat aaaggggtat atggacaatt tctttagtca ttttgcttaa attttcaacc 420
acataactgg gctaattttt tccacacatt tccattttac acctatttca aaccaacact 480
tgcccaaat taccg 495

<210> 752

<211> 466

<212> DNA

480/586

<213> *Drosophila melanogaster*

<400> 752

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tggctttcag agccgtttgc aatcgtctga ctaacttaaa tcgccc aaat tgacaggccc 360
gatatcgagc gatcccgct aagaccataa atgtgactac gaaagtgagc taggtcagtc 420
catgctatat gctgacaatg aaattataat ggtaaattgg aaaaaa 466

<210> 753

<211> 556

<212> DNA

<213> *Drosophila melanogaster*

<400> 753

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tttcatcgat gggggcgaat atatcgcttc accgatgttt gaatgactat agcaactatc 120
gattgctacg attttttttc gaacaaacaa ataattataa gggatttaat aaataaatta 180
aagaaggttc aagaataata taaaacttat gatagtttaa cgaaattatg aaatataaat 240
atagaaatag agtgtagatc aatgatattc ttctgataaa tcttttttat atcatatatt 300
ttatattctt ttatttatta ttcatacaat tttatataaa ttacttcatt tgcactttcc 360
agaagaagca gtttcctatc ggaaaccgc agttaatgta cggcaatcgg ctgggtgcca 420
gggccattcc cccataggat ttcaggggag gcctccagca gaggaaccgg tcgacttggc 480
tgcgaaact tggagagtc agcccgatga ccatgggcga taccatctcg gagctgctgg 540
cgcgaaaccgc accacc 556

<210> 754

<211> 925

<212> DNA

<213> *Drosophila melanogaster*

<400> 754

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tatcgatggt gggcgatggt ttgcaaaaca tcgcctgtag cgcttaacag cagtggtag 120
tatgtgagtt agcagctgct aacaactggt gtattgggcg caaatttcaa aatatgctat 180
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atTTtgctgc gttcccgTcg gctctctcct ttaaagtaat tatggccagt tgtatcggat 840
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<210> 755

<211> 1125

<212> DNA

<213> *Drosophila melanogaster*

<400> 755

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taaggttatc gaaaagtatc gatgcgccgc caggggtact agatccaaat gaaatacaat 120
ttaaaattcg aatgtataat aataattaca gtgttgcta actaataagt ccagtaccct 180
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cattgttcat aaaaagcatg accattgaaa atgtatttaa aatttgtatt ttaagcttat 240
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gagtaactat gccttaaaat gtcatactta accggtaaat tgtaacgggt tccagttcta 360
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gtggacgggc tgtgcgcgat tggttggtgc tattgaccat ggagaagtac attggtaaat 480
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tcatgctggg agtggataat cccgctcata ggaagctcct gctcgaggga gtccggttct 600
tggtcaacgc acccgagcag ttcactctga aggagccgtg tgagctgcat gaggagattg 660
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aaaaaaatgg ggtgagcaga ttaccaggaa ctcatactcc tgtggttttg aattaatgaa 1080
aataacttaa tgtaattaaa ggatcacaac gcgtcacaaa tctttt 1125

<210> 756

<211> 1475

<212> DNA

<213> *Drosophila melanogaster*

<400> 756

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cataatgtat gtatgtaacc ggtataagga agcctttccg actccatgaa gcatataaat 180
taatgagcag gtctagacga tctggccttg tcagactgtc catttaaagg tcgagatctt 240
tggtactatg aacgctagaa agttcagatt atgtctgcag attatagagg tctacgccgc 300
gcaagaatgt tttgaacttt acataccag actaacgact accagccgcc caaatctgtc 360
gcaaacacaa ctttcaaagc ttaccctatt ttattatttg ttttgccatt accttaacgg 420
aacaggatat caacagggat attaatcggg catgaaacag tgacaggccc agtctgtcag 480

gataataaac caggatacgg actttccgcc tcagcctact atggccacat atgccaacac 540
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gaggtacaat tacgaaaatt ttgaagtgtg cacaggcagg ataatagctg gcaatgcact 660
gaataatgca tgcgtgggtg gtgcctgtgc tttcacttcc ccaatttctg ccacccacg 720
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<210> 757

<211> 848

<212> DNA

<213> *Drosophila melanogaster*

<400> 757

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agagcgcgag aggaagaaga agcagggcgc acatgtgcac tatagtaatt cctctctcac 120
tttgtttatg ttttgttttt gtaacgggtt atttcaattg ttgtagctta agctattttt 180
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atacatcgaa aatcataatt gtttcagttt gctgaagaag actgccc aaa gaatatgcta 780
gaatttgagc gtataatata gacagcctct agacaattta attaaactta cacatgagag 840
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<210> 758

<211> 527

<212> DNA

<213> *Drosophila melanogaster*

<400> 758

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cgccagccgt tcgccaagcg cgcgtaattc aaagttatca actcgaaaca ctgtttcccg 180
gaaaaagtgc acaccgttaa atgtgaaata ttcaatcaag tcaactggag aatataaaaa 240
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cagccatggc cgtccaagtt ctgtgatgcc gcttttgggt cgctcctacg cctggttcgt 360
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ctgactgaaa ggggatcgta ccgcctgaa caaaaactca aacgcgttac cttttttttt 480
cgtttccatc tatttggtat taaccgttgt gaaatgggaa cggccac 527

<210> 759

<211> 646

<212> DNA

<213> *Drosophila melanogaster*

<400> 759

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tgagtgagta atcgccctcgt ggctgttggt cgtatgcgtg catgtgtgtg tgtgtttttc 120
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gccaatggg attcgctttg acagatatct tcctattggg ttttcagcca tatgcgaaat 420
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ttttgcattc caacattttg tacaaattac gattggcact cctctgtatt ataacgaacg 540
agaaaatgat ttgcatcaga gaacaacgtt ttgggaagta cagaaacgta atttggttcc 600
ataaataatc aagttaaaat ttaatccata accgatgtca gtttaa 646

<210> 760

<211> 93

<212> DNA

<213> *Drosophila melanogaster*

<400> 760

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gtgagaaaga gatactggat ggtgggacgaa ttc 93

<210> 761

<211> 1064

<212> DNA

<213> *Drosophila melanogaster*

<400> 761

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<210> 762

<211> 1345

<212> DNA

<213> *Drosophila melanogaster*

<400> 762

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cgagaagaag cagaacaaac acacacaaaa attcgcacag tggagcagaa atcaagcttg 360
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aacctaggta cagtgaaatg gttataatta ataaagggtat ttacattgat cccttttttt 540
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<210> 763

<211> 597

<212> DNA

<213> *Drosophila melanogaster*

<400> 763

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tcagcaaatt ctatatttatt cataaatgtc ccaccaacca atgttcttca agacaatagc 540
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<210> 764

<211> 577

<212> DNA

<213> *Drosophila melanogaster*

<400> 764

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caaagaagtt ctacttcacg ggcagggaat gaggggggaa aatttaatta agcctcttcg 480
cgattgttta taaattcatg ttaatgatat ttggacagcc cccttttttcg gatgccgaaa 540
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<210> 765

<211> 940

<212> DNA

<213> *Drosophila melanogaster*

<400> 765

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tggtcgaacg gtcacactgg ccgagagata acggaaaatg tttcaaaggt aagtaaagat 120
tataaacgta ttaagcttaa tactataatt agcttactat tccaagtatg tataattatt 180
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<210> 766

<211> 1131

<212> DNA

<213> *Drosophila melanogaster*

<400> 766

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aatattaact aaacttttaa ggtacataac tcagaaaatt ttcttaaaca gcaataattc 780
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<210> 767

<211> 687

<212> DNA

<213> *Drosophila melanogaster*

<400> 767

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aattggaata taaacttgaa aagatgtggc tcgggaaagt tccacttatt agatggagca 600
cttttaaaaa accgattaga ataccgggt aagcaaaaaa ggtagcttat tgcattgaaa 660
aattaaaatt aaaagttaat ttgggaa 687

<210> 768

<211> 510

<212> DNA

<213> *Drosophila melanogaster*

<400> 768

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ttgataaagc tgttatcagg cggcgagttg cgctaaggte gcgatgtcgc ccttatggaa 180
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acaatatttg ctttattcag ccaaacgttt tcacttaaac caacttggtt gaaattagct 480
ttgattattt gcattgagtg attactgatc 510

<210> 769

<211> 1144

<212> DNA

<213> *Drosophila melanogaster*

<400> 769

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tatggtttag atggttttta gtttttatat ttcgtttagag ggctaattggc actcgttttc 180
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tatgctggga ctgaagccga taccgagctg atccgaacct catagccaga cacgcagcga 780
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acat 1144

<210> 770

<211> 113

<212> DNA

<213> *Drosophila melanogaster*

<400> 770

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<210> 771

<211> 1166

<212> DNA

<213> *Drosophila melanogaster*

<400> 771

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acggtcgggt ctctatttgt tttgtgaaat acaattgatt tcaccagcga ctgagaggag 180
gatcagggtc gtcacctctt ttgcatgccc gacattcgcg cggattcgaa gttcagctgg 240
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<210> 772

<211> 582

<212> DNA

<213> *Drosophila melanogaster*

<400> 772

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gttaccacgc gttttggcat caatcaacaa ataaacacac aagaaacatt tggaaatcgc 540
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<210> 773

<211> 727

<212> DNA

<213> *Drosophila melanogaster*

<400> 773

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gatccggtga ccagcgaaat acgctggaca atagcagatg gtaattacgc gggcactccg 660
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<210> 774

<211> 1010

<212> DNA

<213> *Drosophila melanogaster*

<400> 774

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cttgagccgt gcttaacggg ttttttttcg gggctaagaa cactggttgt gcacacagaa 180
aatgttgaaa atcgatttcg tagtcgcggt tctgtcgcta gtgaagtgtg cacaatccca 240

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<210> 775

<211> 1426

<212> DNA

<213> *Drosophila melanogaster*

<400> 775

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<210> 776

<211> 403

<212> DNA

<213> *Drosophila melanogaster*

<400> 776

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aatatgtata atacgacaat cccgattgtg aacgttgta agccgggcat tatgtcatct 300
tcaactgctg gtgcccccca gttctcatte aaattcgagt gcgtggatgc gtacctaat 360
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<210> 777

<211> 1111

<212> DNA

<213> *Drosophila melanogaster*

<400> 777

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<210> 778

<211> 499

<212> DNA

<213> *Drosophila melanogaster*

<400> 778

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catcatcacc tgcctccac tttgcaaagg gaatatctga gcacacctga gtgggctgga 480
caagcggatg acggaattc 499

<210> 779

<211> 371

<212> DNA

<213> *Drosophila melanogaster*

<400> 779

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<210> 780

<211> 1013

<212> DNA

<213> *Drosophila melanogaster*

<400> 780

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<210> 781

<211> 1063

<212> DNA

<213> *Drosophila melanogaster*

<400> 781

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